



OUR EVIDENCE BASE REPORT 2021



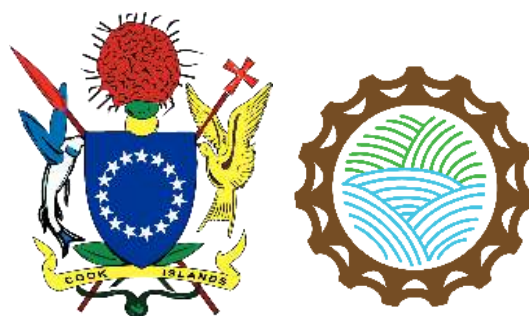


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Executive Summary

The formulation of Te Ara Akapapa'anga Nui- National Sustainable Development Agenda (NSDA) 2020+ takes an extended outlook over 100 years and prioritises a generational scale. This period will be interspersed with short to medium-term plans that will be adjusted as our Nation and our people continue to evolve. This is tentatively planned at 5, 10 and 25 year intervals. These planning periods align with the philosophy and practice of 'Akapapa'anga: the use and importance of genealogical legacies to and for the Cook Islands and its people.

'Akapapa'anga is a cornerstone of Cook Islands Māori society. It informs the way our society is built and the collective enterprise of our people. For example, it underpins our connection, rights and management of land, records the interrelation of our islands over generations, and informs the relationships we have with our people and kin in the Ipukarea and further abroad. It is the relationships inherent in papa'anga (genealogies) that drives our preparations, an impetus to build a strong future for our society, our 'enua and the descendants to come.

Our Evidence Base 2021 updates us on the research aspects of Te Ara Akapapa'anga Nui- National Sustainable Development Agenda (NSDA) 2020+ which is set within the Ka'a research methodology. This provides the information that we will use to formulate an Agenda that will have impacts into the future.

Te Ka'a tei itiki ripiri ia tatou –Research Methodology

The methodological approach of the research programme privileges the place of genealogy in Māori society and its foundational role in the way Māori view their commitment to building *all* of their relationships. As such, the research work and broader NSDA 2020+ is guided by the importance of cordage or ka'a – the braided sennit cord and the primary symbol and embodiment of genealogical lines of connection. The ka'a represents the linking together of peoples and enua that make up the ever growing papa'anga of the Cook Islands Nation.

For our purposes, the ka'a guides the ongoing work of the NSDA 2020+. The braiding and knotting of ka'a requires a careful selection of coconut husks and strands, and the evidence-base that informs this project must also be carefully considered, analysed and braided into the wider agenda by way of robust research and policy-making expertise. The ongoing gathering of data, information and analyses in the ever-changing climate of geopolitics, economy, society, culture and indeed the environment, will be woven together and knotted at the relevant intervals across our 100 year legacy. In this work, the ka'a will be strengthened as we work toward sectoral objectives and, as it grows, it will simultaneously remind us that all sectors and peoples are bound by the single cord that is our Heritage.

The Ka'a incorporates aspects of the scanning method and the scenario sketching method¹. Scanning is a future-oriented research method that attempts to detect early signs of potentially important social, cultural, environmental, political or economic developments through a systematic examination of potential threats and opportunities². In this work, we adopt principles and features of the scanning method, adapted specifically for our NSDA 2020+ preparations.

Scenarios are carefully constructed snapshots of the future and the possible ways an issue can be taken into account. Scenarios help focus thinking on the most important factors driving change in any particular field. By considering the complex interactions between these factors, we can improve our understanding of how change works, and what we can do to guide it.

Scenarios are called 'snapshots' because they portray possible futures without explaining the “full picture” of an issue and of how it might come to be. Factors of change can be explored by "back-casting," working backward in time from the scenario to the present, imagining what would have to happen at each stage to bring it about. This approach typically begins with several related scenarios, considers what steps might lead to each, and thus identifies policies for implementation now. Most importantly, scenarios improve our understanding of the mechanisms underlying change, and thus strengthens strategic planning.

The scenario is a powerful analytic tool for policymaking, a disciplined approach to the speculation and intuition that inevitably influences long-term policy decisions.

The goal in using scenarios is to reveal the dynamics of change and use these insights to reach sustainable solutions to the challenges at hand. By focusing our thinking about what the future may hold, we improve our awareness of the relative importance of current trends and issues, and generate an understanding of how various courses of action may unfold and interact in the short-, medium- and long-term. A full account can be found in “Our Evidence base document”.

¹ Horizon Scanning is gaining acceptance as a methodology to develop a collective view of future directions in an area of interest. A seminal paper that guided the development of the 1st SCAR Science Horizon Scan is the paper by Sutherland et al (2011) that analyzes several horizon scan activities and recommends best practice based on these experience. This paper is highly recommended as basic reading for all persons involved in this Horizon Scan

² Further information about horizon scanning can be found on the OECD website and there is a growing critical literature in various national and academic contexts that reflect on the usefulness, difficulties and development of the scanning method.



Situational Analysis

For Cook Islands National Sustainable Development Agenda 2020+

Report prepared for
Te Koutu Mana Tutara O Te Ipukarea
Office of the Prime Minister
Central Policy and Planning Office

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Many thanks go to the Koutu Mana Tutara O Te Ipukarea (Office of the Prime Minister) for the partnership with Te Vairanga Kite Pakari (TVKP – Cook Islands Research Association) to undertake this crucial aspect of future planning for the Cook Islands. Thank you to Valery Wichman, Director of the Central Policy and Planning Office and all those in the Office of the Prime Minister and National Sustainable Development Agenda Committee members for your assistance in undertaking this assignment. The research team involved in undertaking this work warrant acknowledgement included: Dr Debi Futter-Puati, Dr Christina Newport, Emma Powell, Dr Nanise Young and researchers Rachel Reeves, Dr Corrina Tucker, and Merita Wi-Kaitaia.

Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM or TVKP. Errors or omissions that may have been unwittingly made are regretted.

Executive Summary

This report provides a narrative of the outgoing National Sustainable Development Plan 2016-2020, in order to gauge current progress and plan for future progress through a Cook Islands National Sustainable Development Agenda 2020+. Using a scanning methodology underpinned by 'Akapapa'anga and ka'a, this report finds that while progress is being made on many fronts, that there are areas where improvements are needed. Ten different 'clusters' - or thematised signals of weakness - were identified in the NSDP. These clusters, their associated signals and areas of impact in terms of the 16 NSDP goals, and overall significance are outlined in this report. The three most prominent among these clusters are 1) the need for 'further information' to help inform and provide monitoring for future planning needs; 2) 'environmental sustainability'; and 3) the need for improved 'governance'.

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Introduction

This report contributes a situational analysis toward the development of a new Cook Islands National Sustainable Development Agenda (2020+), to replace the current 2016-2020 National Sustainable Development Plan (NSDP) (Government of the Cook Islands, 2019). This important document will provide a 100-year vision of wellbeing for the Cook Islands.

The terms of reference for this piece of research are to: “Prepare a report based on the 2019 indicator report and associated data to build an overall narrative of where the country is currently at in the context of the report and the data” (TVKP, 2020, 1). The current iteration of the NSD plan consists of 16 goals, comprised of 66 indicators. The goals are:

1. Improve welfare, reduce inequality and economic hardship;
2. Expand economic opportunities, improve economic resilience and productive employment to ensure decent work for all;
3. Promote sustainable practices and effectively manage solid and hazardous waste;
4. Sustainable management of water and sanitation;
5. Build resilient infrastructure and ICT to improve our standard of living;
6. Improve access to affordable, reliable, sustainable, modern energy and transport;
7. Improve health and promote healthy lifestyles;
8. Inclusive and equitable quality education and promote life-long learning opportunities;
9. Accelerate gender equality, empower all women and girls, and advance the rights of the youth, the elderly and disabled;
10. Achieve food security and improved nutrition, and increase sustainable agriculture;
11. Promote sustainable land use, management of terrestrial ecosystems, and protect biodiversity;
12. Sustainable management of oceans, lagoon and marine resources;
13. Strengthen resilience to combat impacts of climate change and natural disasters;
14. Preserve our heritage and history, protect our traditional knowledge, and develop our language, creative and cultural endeavours;
15. Ensure a sustainable population engaged in development for Cook Islanders by Cook Islanders; and
16. Promote a peaceful and just society and practice good governance with transparency and accountability.

This report is a situational analysis using the (Horizon) scanning method, which assesses where the nation is currently positioned, noting emergent themes and issues that can help with future planning. A situational analysis is akin to undertaking a health and wellbeing check of ‘where things are at’.

The scanning method used for the situational analysis is an approach that searches for certain cues (such as keywords or themes) about existent and emerging issues or signals that can alert us to important developments. In this instance, the research is underpinned by ‘Akapapa’anga and ka’a’, which refers to the underlying significance of Cook Island Māori society and connections to each other, the land (enua), the Ocean (Moana), and air (Mareva), and wider concerns and hopes. In her work, Powell (2019) proposes that ‘Akapapa’anga describes Cook Island Māori society as “genealogical legacies rather than a nationalist ensemble of historic societies”, thereby incorporating the connections of Cook Island Māori across space and time.

The following describes the process used to identify signals and clusters in the NSDP (2019). A total of 10 clusters were identified: systemic issues, workforce / skills-base needs, resourcing, infrastructure, governance, economic sustainability, environmental sustainability, health and wellbeing, heritage and culture preservation and continuation, and further information. The former are linked by signals with similar outcome concerns. The last cluster – further information – is a cluster

that identifies areas throughout the report where it is imperative that further information be garnered before setting goals and indicators for future planning.

The following provides an outline of findings that collectively identify areas of weakness in the current NSDP, that need to be addressed for future planning. Firstly, an outline of the methodological approach is provided.

Methodology

The methodology uses a future-oriented research approach that seeks out indicators of future opportunities and warnings of what might come to be (Amanatidou *et al.*, 2012). In this instance, the focus is mainly on what has not quite come to fruition for various reasons in the NSDP, and on identifying where there are weaknesses. Resulting data is then used to assist in future-planning. The analysis area has been clearly defined due to its focus on one key document: the NSDP (Government of the Cook Islands, 2019). The approach loosely follows that described by Amanatidou *et al* (2012) but is adjusted toward a better fit with this particular research objective. The steps used were:

1. *Development of a heuristic search profile using keywords:* A full list of key words and the refinement of these toward the final keyword list is provided in Appendix a.
2. *General scan for signals:* scan of an electronic copy of the NSDR using 'ctrl + f' (to 'find' keywords). Keywords were entered into a spreadsheet with a brief description, context and significance / impact notes, and reference page.
3. *Refined scan and review of spreadsheet data.*
4. *Preliminary assessment and selection:* A scan of highlighted topics / areas was undertaken to identify signals and potential insights. Signals were further analysed for their plausibility, potential area of impact, novelty, and strength in relation to the issue.
5. *Clustering of signals:* the list of signals was finally clustered according to potential emerging / emergent signals.
6. *Feedback and review:* Feedback on signals, clusters and significance was provided by the research team and incorporated into the research.

Probably the most challenging aspect of this process, was the evaluation process, that is, which signals to retain, how to cluster them, and the worthiness of each resultant cluster. Amanatidou *et al* (2012, 217) provided a table, replicated - in part - here (Table 1), that offers guidance on evaluation criteria:

Table 1: Selection of evaluation criteria for scanning approaches

| | |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Duration of weakness of signal, also associated with time at which signal is observed |
| 2 | Origin (stakeholder(s) behind them) and novelty of weak signals |
| 3 | Rising ethical, legal, societal or cultural issues |
| 4 | Existence of a strategy already concerned with specific weak signal(s) and emerging issues by a government or industry, political party or lobby, or international organisation |
| 5 | Positive and negative impacts and associated policy implications |
| 6 | Policy recommendations |

(Source: Amanatidou *et al.*, 2020, pg 217).

Each of the points made in Table 1 were considered in this analysis.

To complete the clustering stage, signals were physically reorganised in the spreadsheet by topic area. At times there were signals that could be directed toward more than one cluster, so when this occurred, the signal was duplicated as I felt it was important not to 'lose' anything by having to

choose just 'one' possible cluster to assign the signal to. Once completed, feedback was sought before compiling the final results.

Research Ethics

There are no notable ethical concerns to be aware of for the purposes of this research. Materials used for analysis are from the public domain; there was no need to gain informed consent from participants.

Research Limitations

There are challenges in using the scanning methodology (Delaney, 2014; Schultz, 2006). Schultz (2006) referred to the term 'cultural contradiction', an issue that needs to be grappled with when looking for (weak) signals. She provides two different instances of cultural contradiction occurring: to gauge early or weak signals and possibilities requires strategic thinking, but there is usually little firm evidence available to support any such claims. Second, the places we may more likely find such signals may not be in peer-reviewed work that would be the usual domain for finding evidence to support claims, but instead may more located in more peripheral and less conventional (in an academic sense) contexts and mediums. The key text here is a government document that is not particularly conducive to finding the kinds of information that might best capture new or emerging 'voices'. Nonetheless, signals and cluster have been detected, and found to be constructive for further discussion and analysis.

Positionality

As a papa'a working with a team of Cook Island researchers, the positioning of 'outsider' in the team cannot be ignored. Bonner and Tolhurst (2002) describe a number of advantages and disadvantages to this positioning¹, some of which are applicable here. The advantages including seeing "properties lost to the insider because of familiarisation" and the possibility of discovering "something of value to [the] hosts", therefore coming to the research with a potentially more objective view (Bonner and Tolhurst, 2002, Table 1). Disadvantages include a limited ability to speak and understand Cook Islands Māori, therefore "'cultural" or linguistic (jargon) distances" may "desensitise" the researcher to really understanding needs and meanings (Bonner and Tolhurst, 2002, Table 1). Being part of a team of local researchers helps ensure that any unanticipated problems that arise can be worked through collectively to mitigate any disadvantages, at the same time providing a broader perspective.

Findings

Ten clusters were identified in the NSDP 2019 using a scanning approach. These clusters vary in size according to how many signals were identified. Some signals appear in multiple clusters, given their potential impact and significance. This section presents and discusses each of the clusters. In order to clearly identify priority areas for discussion and future planning, each of the clusters, the number of signals and the goals that each cluster is associated with are brought together in Table 2 on the following page:

¹ The authors are referring to anthropologists in a completely unfamiliar environment, whereas this researcher has nearly three years' experience living and working in Rarotonga and has many connections here.

Table 2: Clusters with associated goals and number of signals per cluster and goal

| | Goals | | | | | | | | | | | | | | | | T= |
|-------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| Further Information | | 1 | 2 | 3 | 1 | | 1 | 1 | 1 | | 1 | 3 | | 1 | 3 | 6 | 24 |
| Environmental sustainability | | 1 | 3 | 1 | | 1 | | | | 2 | 3 | 2 | | | | | 13 |
| Governance | | | 1 | | 1 | | | | | 1 | | | | | | 7 | 10 |
| Systemic issues | | | | | | | 2 | | 2 | | | | | | 2 | 4 | 10 |
| Health and wellbeing | 2 | | | | | | 4 | | 1 | | | | | | 1 | 1 | 9 |
| Infrastructure | | 1 | 2 | | 1 | 4 | | | 1 | | | | | | | | 9 |
| Resourcing | | | | | | | 1 | 1 | | 1 | 1 | 1 | | 1 | | 2 | 8 |
| Workforce / skills-base needs | | | | | 1 | | | 1 | | 1 | | | | | 1 | 3 | 7 |
| Economic sustainability | 1 | 1 | | | | | | | | | | 1 | 2 | | 1 | 1 | 7 |
| Heritage & cultural preservation & continuation | | | | | | | | | 2 | | | | | 2 | | | 4 |
| Total signals per goal | 3 | 4 | 8 | 4 | 4 | 5 | 8 | 3 | 7 | 5 | 5 | 7 | 2 | 4 | 8 | 24 | |

Table 2 shows that Goal 16 (“Promote a peaceful and just society and practice good governance with transparency and accountability”) has by far the most signals associated with it (n=24), followed by Goals 2 (involving work and the economy), 3 (sustainable practices), 7 (health) and 15 (“sustainable population engaged in development for Cook Islanders by Cook Islanders”) (n=8 each).

Another way to read Table 2, which will be used to guide the following discussion is by looking at the clusters in terms of how many signals are associated with each. Outstanding in this respect is the need for ‘further information’ cluster (n=24), followed by ‘environmental sustainability (n=13), then ‘governance’ and ‘systemic issues’ (n=10 each).

Further Information

A number of areas in the NSDP 2019 report lacked sufficient information. These information deficits concerned areas such as incomplete databases, inadequate resourcing to gather information or monitor a situation, and a lack of goal or target in order to measure progress. Notably, were recurrent issues linked to the Pa Enua. Table 3 (over the page) outlines the list of signals pointing to areas where further information is needed, and the significance or impact of these signals.

Table 3: Further information cluster signals and significance or impact

| Further information | | |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | | Significance / impact |
| General lack of information (need to understand reasons behind issues / areas) | Potable water in the Pa Enua (Goal 4). | Environmental and economic sustainability; Health and wellbeing; happiness and quality of life; education and training; labour force competencies; governance and government competence; cultural practices continuity; accessibility; affordability; transparency; disaster preparedness and infrastructure. (Goals 2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15 & 16). |
| | Protected wetland areas, especially in the Pa Enua (Goal 11). | |
| | Waste water management and sanitation, especially in the Pa Enua (Goal 4). | |
| | Piped water to households in the Pa Enua is lagging (Goal 4). | |
| | Economic returns from marine resources not on track (Goal 12). | |
| | Changing population (Goal 15). | |
| | Limited data available regarding employee wellbeing (Goal 2). | |
| | Decline in the research register research (Goal 15). | |
| | High reoffending (Goal 16). | |
| | High levels of youth unhappiness (Goal 9). | |
| | Difficulty in attracting skilled workforce (Goal 8). | |
| | Low number of parliamentary sitting days (Goal 16). | |
| | Recycling infrastructure and rates of recycling (Goal 3). | |
| Target needed to measure progress | Mental health diagnosis and treatment (Goal 7). | |
| | New target for monitoring purse seine fishing catches (Goal 12). | |
| | Stream water quality in Aitutaki and Rarotonga (Goal 12). | |
| | Quality of life indicators are incomplete (Goal 15). | |
| | Levels of access to the justice system (Goal 16). | |
| | Levels of cultural activity engagement (Goal 14). | |
| Database / reporting and systems | Government ministry issues with reporting systems and database updating and maintenance (Goal 16). | |
| | Need systems for managing e-waste items (Goal 3). | |
| | Reckless driving and driving while under the influence records / data are not up to standard (Goal 16). | |
| | Ministry of Justice reporting systems and database are not up to standard (Goal 16). | |
| | Government's asset register is incomplete (Goal 5). | |

This cluster is important given the number of signals associated with it, and the number of areas implicated across the current NSDP goals. The impact of these signals and cluster overall are far-reaching, touching economic, environmental, institutional and socio-cultural wellbeing. The central message evident here is that any future planning taking place where there are information gaps, will at worst be inadequate, and at best aspirational, as plans will lack a solid foundation.

The information, monitoring and compliance 'gaps' that occur across multiple ministries and the public sector are of immediate significance for planning the NSDA 2020+. The OECD (2009, 26) cite five dominant gaps which make governance and future planning difficult; at the top of the list is "information gap[s]", followed by gaps in capacity, fiscally, administratively and policy. These gaps are all apparent in the current NSD plan and must be addressed for a success and credibility in future planning.

Environmental Sustainability

Environmental sustainability has many definitions, including "as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity" (Morelli, 2011, 6). As this definition suggests, ensuring environmental sustainability for now and the future is an extensive task, reflected here in the number of indicators toward this end. A list of the key signals in this cluster and their significance and areas of impact are provided in Table 4:

Table 4: Environmental Sustainability cluster signals and significance or impact

| Environmental Sustainability | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Land use for agricultural production declining to make way for construction and development (Goal 10). | Environmental, Human health, and economic wellbeing and sustainability; family and community; biodiversity protection; quality of life; affordability; resourcing and infrastructure costs and pressures; tourism and economic diversity issues; land use challenges; food security. (Goals 2, 3, 4, 6, 10, 11, & 12). |
| Lack of information about wetland areas and a need to continue wetland areas protection (Goal 11). | |
| Need more monitoring resources for protected species (Goal 11). | |
| More resourcing needed to enable better monitoring of coral cover across the Cook Islands (Goal 11). | |
| Purse seine fishing remains a concern for many; need to ensure sufficient monitoring and controls are in place if this practice continues (Goal 12). | |
| Stream water quality in Rarotonga and Aitutaki is of concern; there is a need for improved water testing standards and measures (Goal 12). | |
| A gap remains with sanitation and wastewater management compliance targets (compliance is costly, but improvements are being made with new builds expecting to be compliant) (Goal 4). | |
| Progression to 100% renewable energy in Rarotonga is not complete (Goal 6). | |
| Recycling infrastructure is insufficient and under-utilised (Goal 3). | |
| Dangerous (hazardous and health) waste management is improving but amounts are increasing, notably e-waste (Goal 3). | |
| General environmental pressures from increased tourism on the islands, especially Rarotonga (Goal 2). | |
| Desire to produce more locally grown food for local consumption is facing workforce pressures with younger people indicating that they are not interested in growing (Goal 10). | |

Again, the impact of this cluster is widespread across a number of the NSDP goals, and constitutes a multitude of signals relating to matters on land through to the ocean.

The importance of a healthy environment in the Cook Islands is clear and readily apparent: comprised of a series of small, mainly low lying islands that are vulnerable to extreme weather events such as cyclones, and where subsistence living remains important, particularly on the Pa Enua (and increasingly so in Rarotonga with the advent of Covid-19). A healthy environment is akin to caring for our families and communities; environmental sustainability is the lifeline of Cook Islands people, and a significant factor for the country's economic revenue and continued development and must be monitored and protected.

Governance

Governance in the simplest terms refers to the ways in which a state or group of people are directed and controlled, or "the exercise of power or authority by political leaders for the well-being of their country's citizens or subjects", which deals with "the public sector, power structures, equity, and ideals of public administration" (Tamayaocsu, 2014, 1). A range of signals occur in relation to governance, and in particular of poor governance or the need for improvements. Areas included are listed in Table 5 below:

Table 5: Governance cluster signals and significance or impact

| Governance | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Land use for agricultural production has been declining to make way for construction and development, which is counter to the desire for more local agricultural production, suggesting land use and development needs addressing (Goal 10). | Future planning and development; family and community; wellbeing; quality of life; government operations and responsibilities; environmental sustainability; food security; social and legal justice; capable workforce; compliance and monitoring. (Goals 3, 5, 10 & 16). |
| Land issues including land court are progressing very slowly and are not being realised, causing ongoing issues for people (Goal 16). | |
| Government asset information (Asset Finder software) needs to be completed and maintained (Goal 5). | |
| Ministry of Justice operations need improvement including for criminal case disposal, outcome measures and access to justice information (Goal 16). | |
| Reoffending rates are over 50% (Goal 16). | |
| Lack of sufficient database sharing of information between the Ministry of Justice and Police (Goal 16). | |
| Overall need for a more skilled workforce, reporting systems and database updating across government ministries; ministries are not overall reporting to very high standards (Goal 16). | |
| Lack of compliance in monitoring public services in the Pa Enua (Goal 16). | |
| Low level of parliamentary sitting days per year (Goal 16). | |
| Recycling and waste management industry needs updating to cater to new kinds of waste, to encourage recycling practices, and to look for more longer term sustainable options (Goal 3). | |

Good governance matters: it refers to a situation where "processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal" (United Nations, n.d., 3). In order to achieve this, certain characteristics must be apparent: 1) participatory; 2) consensus oriented; 3) accountable; 4) transparent; 5) responsive; 6) effective and efficient; 7) equitable; 8) inclusive. The findings of this report signify weaknesses in a number of these characteristics, with matters pertaining to compliance and Goal 16 such as the Ministry of Justice operations and outcomes as per the NSDP indicators as an example.

Systemic Issues

There are several matters that could fall under 'systemic issues' - problems that exist at a system rather than individual level - and that subsequently, require systemic level change to address issues effecting groups of individuals. The NSDP (2019) indicates a range of systemic problems including poor lifestyle choices or practices, gender bias, and areas where further support, compliance, or even legislative change may be needed. A changing population lends itself to concerns regarding retaining a Cook

Islands identity: its culture and values. This in turn relates to the ability to attract and retain a high calibre, skilled workforce of Cook Islands people, and striking a comfortable balance with foreign workers where needed. Systemic issues are evident in societies all over the world, and are often difficult to resolve, but nonetheless important for a peaceful society where wellbeing is high. Table 6 below outlines each of the signals in this cluster, noting why they are of significance.

Table 6: Systemic Issues cluster signals and significance or impact

| Systemic Issues | |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Unhealthy lifestyle habit with high rates of overweight and obese children (46% overweight or obese as at 2018) (Goal 7). | Quality of life; Health and wellbeing; Equality; Crime and victim support; Economic, Government and workforce inefficiencies. (Goals 7, 9, 15 & 16). |
| Unhealthy lifestyle choices made in relation to food, exercise and STI safety (Goal 7). | |
| Insufficient numbers of female political representatives (Goal 9). | |
| Gender pay disparity (Goal 9). | |
| Concerns indicated about increasing numbers of foreigners coming into the country, and monitoring this trend (Goal 15). | |
| Concerns about Cook Islanders leaving the country (Goal 15). | |
| High reoffending rates (over half of offenders reoffend) (Goal 16). | |
| Domestic violence is an ongoing problem, with little support services available for victims (Goal 16). | |
| Government ministries are not reporting to high standards (average performance was 62% as at 2018); workforce issues (Goal 16). | |
| Lack of compliance in public services, especially the Pa Enua; workforce issues (Goal 16). | |

Health and Wellbeing

Health and wellbeing issues in the Cook Islands are associated with poor lifestyle choices, structural constraints (such as health care limitations – infrastructural and fiscal; employment and post-secondary education prospects), and long-standing attitudes (toward mental health disorders and domestic violence). Of particular concern here is youth unhappiness, and the future implications of this at the individual level (e.g. suicide, depression) through to the wider population (continuing migration / population change), as per Table 7 below:

Table 7: Health and wellbeing cluster signals and significance or impact

| Health and wellbeing | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Some on low incomes have trouble meeting their basic needs (Goal 1). | Health and life expectancy; quality of life; family; community; population; support / health services. |
| Welfare goals are progressing, but wealth inequality is continuing to grow (Goal 1). | |
| Health expenditure remains low (Goal 7). | |
| Unhealthy lifestyle habits are beginning in childhood, including poor food choices resulting in high rates of overweight and obese children (Goal 7). | |
| Poor lifestyle choice in general, in particular STD safety, food, and exercise (Goal 7). | |
| Youth unhappiness, including thoughts of suicide (Goal 9). | |

| | |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Domestic violence is an ongoing issue where little victim support is in place (Goal 16). | (Goals 1, 7, 9, 15 & 16). |
| Overall quality of life has not been able to be measured (Goal 15). | |
| Shortage of systems and resourcing for mental health assessment; need a target so that progress can be monitored (Goal 7). | |

The signals are clear in that major efforts need to be made, starting with the youngest children, to try and shift some of the negative trends in a positive direction. As an example, the NSD Plan (2019, 65) noted a “need to focus on dietary interventions and mandatory health food policies in schools”. Much research shows however, that to successfully curb obesity, prevention is the best approach, and this needs to happen on multiple levels: “actions to prevent childhood obesity need to be taken in multiple settings and all levels of government. They also need to incorporate a variety of approaches and involve a wide range of stakeholders” (WHO, 2012, 11).

Infrastructure

Infrastructure refers to those basic organisational and physical structures and facilities required for the smooth operations of a given society, enterprise or other area (e.g. roads, buildings, utility supply). Here the reference is to the national infrastructure requirements for the Cook Islands, and where there is a need to improve infrastructure, gather more information, or be aware of infrastructural pressures. A wide range of key infrastructure areas needing some attention are signalled in the NSD report, as presented in Table 8:

Table 8: Infrastructure cluster signal and significance or impact

| Infrastructure | |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Public infrastructure accessibility for disabled / mobility impaired (Goal 9). | Equality; community; family; human, environmental and economic wellbeing and sustainability; government fiscal responsibility; tourism (Goals 2, 3, 5, 6 & 9). |
| Renewable energy progression in Rarotonga (goal was 100% by 2020) (Goal 6). | |
| Water and sanitation management (lacking information from the Pa Enua) (Goal 6). | |
| Recognition of increased pressure on infrastructure from tourism (Goal 2). | |
| Internet remains slow (submarine optic cable is now in place for Rarotonga and Aitutaki) (Goal 5). | |
| Recycling and waste management needs improving (Goal 3). | |
| Dangerous (hazardous and health) waste management needs to be addressed, especially with e-waste increasing on the island (Goal 3). | |
| Reliable, affordable shipping transportation options around the islands (Goal 6). | |
| Benchmark for aviation to the Pa Enua needed i.e. flights / week (Goals 6). | |

Reliable and well-maintained infrastructure is a challenge for any nation like the Cook Islands, given limited funds and resourcing (CTA, 2012). The added burden on infrastructure that tourism brings is also a part of this cluster that is worth of acknowledgement given its association with future economic planning. Infrastructure is important for the physical operations of a country, and in turn has implications for the overall happiness of people and the smooth running of society. Infrastructure planning and maintenance is needed for future economic, environmental and social wellbeing.

Resourcing

Resourcing shortfalls appear in an array of areas in the Cook Islands, from mental health to protecting endangered species. Like infrastructure, adequate resourcing is challenging in nations with smaller populations where there is limited government revenues. Troubles with resourcing span a number of areas, notably health, education, environment, and justice – all key areas of government and critical to social wellbeing. Table 9 below presents the signals comprising the resourcing cluster.

Table 9: Resourcing cluster signals and significance or impact

| Resourcing | |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Shortage of systems and resourcing for mental health assessment; no target for monitoring the situation (Goal 7). | Health and wellbeing; environmental sustainability and care; preservation of historical / cultural resources; Family and community; economic sustainability and security; higher education needs; governance. (Goals 7, 8, 10, 11, 12, 14 & 16). |
| Resourcing issues for monitoring against pest outbreaks (Goal 10). | |
| Resourcing issues for monitoring protected species (Goal 11). | |
| Resource shortage for enabling better monitoring of coral cover across the Cook Islands (which is noted as poor on some islands) (Goal 12). | |
| Lack of resourcing to complete digitisation of cultural resources (Goal 14). | |
| Insufficient support for those experiencing workplace issues (Goal 8). | |
| Insufficient support for victims of domestic violence (Goal 16). | |
| Need for more resourcing in the public services (Goal 16). | |

Workforce / Skills-Base Needs

Workforce problems and skills-base shortages among the workforce have been identified as noteworthy enough to independently stand alone as a cluster. This is due to the widespread distribution of the issues through public services and government ministries (there is not sufficient information available for the private sector), and limited educational opportunities post-secondary school. Inefficiencies in the workforce has meant that the Government's asset information software (Asset Finder) has not been utilised to its potential. A law change that placed a maximum age on those able to serve as Justices of the Peace (JPs) has resulted in a shortage of JPs. Government ministries and Public Services have noted issues with work standards, attracting and retaining a capable workforce. All these equates to inefficiencies, ineffectiveness, and a lack of accountability (key tenets of good governance). Table 10 lists the signals and their significance or areas of most impact.

Table 10: Workforce/skills-base cluster signal and significance or impact

| Workforce / Skills-base needs | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / Impact |
| Young people were found to not be particularly interested in growing food, yet there is a desire for more locally produced food for local consumption (Goal 10). | Quality of life; Health and wellbeing; economic sustainability; governance standards; Labour standards; Education (especially post- |
| Government asset information (using Asset Finder, introduced in 2014), has not been fully utilised (Goal 5). | |
| Concerns indicated about increasing numbers of foreigners coming into the country, and monitoring this trend (Goal 15). | |
| Ministry of Justice: shortage of JPs (due to a law change capping that age limit); need for better record keeping and access (Goal 16). | |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Government ministries generally need a more skilled workforce (Goal 16). | secondary school); immigration / migration. (Goals 5, 8, 10, 15 & 16). |
| Public services need a more skilled and capable workforce; and compliance issues apparent in the Pa Enua (Goal 16). | |
| Need for more education expenditure (especially post-secondary to assist with increasing workforce skills-base without having to leave the Cook Islands (Goal 8). | |

Economic Sustainability

Economic sustainability refers to “practices that support long-term economic growth without negatively impacting social, environmental, and cultural aspects of community” (University of Mary Washington, 2020). Given that socio-cultural, institutional / systemic, and environmental sustainability matters are discussed elsewhere in this report, the focus here is on the economic.

Widespread awareness of the need to diversify the economy is already apparent, exacerbated by Covid-19 as the nation experiences what a tourist-free economy looks like. Economic sustainability is a clear necessity important for any country. This cluster brings together a number of signals that together present several areas where gaining further revenue might be possible, and notes several deficits or areas that need attention (e.g. fiscal preparedness for the future). The importance of this economic sustainability cluster pushes beyond just the economic to matters of health and wellbeing, population and immigration, and environmental sustainability. Table 11 (over the page) presents signals central to economic sustainability, including their corresponding areas of significance and impact.

Table 11: Economic sustainability cluster signals and significance or impact

| Economic sustainability | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Need to look at why economic returns from marine resources are not on track (Goal 12). | Economy: improving and diversifying; Health and wellbeing; population and immigration; future planning and preparedness; environmental sustainability. (Goals 1, 2, 12, 13, 15 & 16). |
| Desire for obtaining a clearer picture of how much investment in the Cook Islands is local versus foreign, with an aim to increasing local investment (Goal 15). | |
| Need for continued fiscal preparedness for when disaster strikes (Goal 13). | |
| Addressing the reliance on tourism as the main area of revenue generation and economic activity, especially given that there are currently no caps on tourism activity (Goal 2). | |
| Government needs to find ways to get people to comply with VAT and tax laws (Goal 1). | |
| Continued work on government fiscal preparedness for when disaster strikes (Goal 16). | |
| Complete register of government assets / infrastructure, in order to assess future needs and disaster preparedness (e.g. cyclone shelters) (Goal 13). | |

Heritage and Culture Preservation and Continuity

Comprising the final cluster from across the least amount of NSDP goals, this cluster refers to protecting Cook Islands heritage and culture, and ensuring the continuity of cultural practices that enable traditions to be kept alive. A critical aspect of this is language: a decline in language use is associated with cultural loss (Navare, 2013). Although ‘last’ in terms of discussion here, it is nonetheless of great importance. It signals the need to continue keeping Cook Islands Māori language and culture alive, particularly through young people, and to ensure that history is preserved in a

modern environment though digitisation. Table 12 on the following page lists the signals for this cluster, and their areas of significance or impact:

Table 12: Heritage and culture signals and significance or impact

| Heritage and culture preservation and continuity | |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Signals | Significance / impact |
| Ensure continuity of language preservation with young people in particular, from an early age (Goal 14). | Cultural survival; tourism (attraction); identity (as Cook Islanders); family and genealogy. (Goals 9 & 14). |
| Resourcing needed to complete digitisation of cultural resources (Goal14). | |
| Concern with unhappy youth and not seeing much future opportunity for themselves in the Cook Islands (Goal 9). | |
| Insufficient knowledge of levels of cultural activity engagement (Goal 9). | |

Conclusion

This report has found that amid the progress being made on many fronts in the Cook Islands towards the NSDP, that there is also an urgent need to address many areas also. Of the 10 clusters identified in the 2019 NSDP, the most pivotal for future planning success is the need for further information. Having a solid base of information on which to build a robust and achievable future plan that is of benefit to the Cook Islands and its people must take priority. This links to the need to ensure that the necessary measurements are in place to capture progress, that resourcing is available where it is most needed, that matters involving population, workforce and skills-based gaps, the infrastructural and environmental pressures that tourists place on the island and the over-reliance on tourism for the economy are all given careful consideration and strong action plans.

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Appendix A

| Initial keyword list | Keywords removed | Key words added | Final list of keywords |
|-----------------------|------------------|-----------------|------------------------|
| Advance/s | | | Advance/s |
| Answer/s | | | |
| Breakdown/s | | | |
| Breakthrough/s | | | |
| Catastrophe | | | |
| Change/s | | | Change/s |
| Clarification/clarify | | | Clarification/clarify |
| Complicated/tions | | | Complicated/tions |
| Concern/s | | | Concern |
| Crisis | | | |
| Detecting/tion | | | Detecting/tion |
| Develop/ing/ment | Develop/ing/ment | | |
| Difficult/ties | | | Difficult/ties |
| Disaster | | | Disaster |
| Discover/ies | | | |
| Emerge/ing/ent | | | |
| Evolve/ing | | | |
| Evolution | | | |
| Failure/s | | | |
| Friction/s | | | |
| Frightening | | | |
| Future | | | Future |
| Growth | | | Growth |
| Imminent | | | |
| Impact | | | Impact |
| Impend/ing | | | |
| Innovation | | | |
| Invention | | | |
| Issue/s | | | Issue/s |
| Modernise/ation | | | |
| Modify/fication | | | |
| Novel/ty | | | |
| Ominous | | | |
| Opportunity/ies | | | Opportunity/ies |
| Outlook | | | Outlook |
| Potential | | | Potential |
| Predicament | | | |
| Pressure/s | | | |
| Problem/s | | | Problem/s |
| Progress/ion | | | Progress/ion |
| Promising | | | |
| Question/s | | | Question/s |
| Result/s | Result/s | | |
| Revolution | | | |
| Solution/s | | | |
| Strain/s | | Constraint | |
| Stress/es | | | |
| Sustainable | Sustainable | | |
| Tension/s | | | |
| Threatening | | | |
| Transform/ation | | | |
| Upcoming | | | |



Synthesis Report

For the Cook Islands National Sustainable Development
Agenda 2020+

Report prepared for
Te Koutu Mana Tutara O Te Ipukarea
Office of the Prime Minister
Central Policy and Planning Office

Dr C A Tucker

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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM or TVKP. Errors or omissions that may have been unwittingly made are regretted.

Executive Summary

This report provides an overview of findings from five analyses undertaken to assist planning for future progress in the Cook Islands National Sustainable Development Agenda (NSDA) 2020+. A scanning methodology, 'Akapapa'anga and ka'a were used to guide the collection of data, findings analysis and recommendations. Findings are divided into two parts: the situational analysis which identified gaps and areas for improvement in the existing National Sustainable Development Plan (NSDP)2016-2020, while the other part synthesised the results of four different reports. A total of sixteen themes were identified, with a description and brief discussion of their significance provided. The five most prominent themes to emerge from the findings are:

- 1) Economic sustainability – the need for diversification and increased self-sustainability;
- 2) (Human) health and wellbeing – the need to better support the most vulnerable communities;
- 3) Environmental sustainability – addressing policy, monitoring and resourcing gaps and developing more ecologically beneficial agricultural practices;
- 4) Education – further embedding of Māori language and traditional skills and knowledge in schools, and more opportunities for school-leavers; and
- 5) Governance – improved governance needed in a range of areas, including land-related matters.

Recommendations based on methodology and findings are offered.

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Introduction

The report provides an overview, conclusions and recommendations from five analyses conducted toward the development of a new Cook Islands National Sustainable Development Agenda (NSDA) (2020+). These analyses comprise a scanning analysis of:

- Stakeholder consultations (NSDA consultations from October 2020, expert panel discussions e.g. Public Sector Leaders Conference, Asian Development Bank Conference, and National Sustainable Development Agenda Forum);
- Print, digital and social media (Up to five sources from the last 24 months including newspaper, radio and social media);
- Documents (Research completed or underway in the last 24 months, which has been approved by Cook Islands Research, and Government / development partner commissioned reports);
- NSDA 2020+ Forum (Based on notes taken from a forum held on 3rd December 2020); and a
- Situational analysis (Based on the NSDP 2019 indicator report).

The new National Sustainable Development Agenda (NSDA) will provide a 100-year plan toward the sustainable development of the Cook Islands.

The NSDA+ research project was established through a Memorandum of Understanding between the Koutu Mana Tutara O Te Ipukarea (Office of the Prime Minister) and Te Vairanga Kite Pakari (TVKP – Cook Islands Research Association). The TKVP project committee were responsible for the oversight and implementation of the research. This included recruiting, advising and supporting the research team, liaising with the Office of the Prime Minister focal point and providing quality assurance of each research output.

At the time of writing and as these analyses towards the NSDA are being produced, it is important to acknowledge the global impact of the devastating Covid-19 virus that has effected millions and shut down borders across the world. The Cook Islands has been extremely fortunate so far in not having had the virus reach these shores, but the economy has taken a huge hit given the reliance on the tourism industry for revenue. This is mentioned here as some of the analyses have taken place during Covid-19 (such as the consultations), while other analyses were pre-Covid 19. This means that the implications of Covid-19 for the future will likely be somewhat understated in this report but will surely be at the forefront of much decision-making for some years to come, with lessons learned contributing to forward planning in key documents like the NSDA 2020+.

The current iteration of the NSDP consists of 16 goals (comprised of 66 indicators):

1. Improve welfare, reduce inequality and economic hardship;
2. Expand economic opportunities, improve economic resilience and productive employment to ensure decent work for all;
3. Promote sustainable practices and effectively manage solid and hazardous waste;
4. Sustainable management of water and sanitation;
5. Build resilient infrastructure and ICT to improve our standard of living;
6. Improve access to affordable, reliable, sustainable, modern energy and transport;
7. Improve health and promote healthy lifestyles;
8. Inclusive and equitable quality education and promote life-long learning opportunities;
9. Accelerate gender equality, empower all women and girls, and advance the rights of the youth, the elderly and disabled;
10. Achieve food security and improved nutrition, and increase sustainable agriculture;
11. Promote sustainable land use, management of terrestrial ecosystems, and protect biodiversity;
12. Sustainable management of oceans, lagoon and marine resources;
13. Strengthen resilience to combat impacts of climate change and natural disasters;
14. Preserve our heritage and history, protect our traditional knowledge, and develop our language, creative and cultural endeavours;

15. Ensure a sustainable population engaged in development for Cook Islanders by Cook Islanders; and
16. Promote a peaceful and just society and practice good governance with transparency and accountability.

The concern of this report is to consider where the nation is currently positioned, noting emergent themes and issues that can help with future planning for the Cook Islands. The analyses presented here are akin to undertaking a health and wellbeing check of 'where things are at'.

The (horizon) scanning method is used for these analyses, and is underpinned by 'Akapapa'anga and ka'a', which refers to the underlying significance of Cook Island Māori society and connections to each other, the land (enua), the ocean (moana), the air (mareva), and wider concerns and hopes. In her work, Powell (2019) proposes that 'Akapapa'anga describes Cook Island Māori society as "genealogical legacies rather than a nationalist ensemble of historic societies", thereby incorporating the connections of Cook Island Māori across space and time.

The analyses undertaken towards this report combined provide great insights into how the Cook Islands are currently positioned with the NSDP, and where possibilities lie for the NSDA 2020+. Strong themes emerging in the analyses include the need for further information, economic diversity, health and wellbeing concerns and needs, environmental sustainability, improved educational opportunities and improved or changes in governance. These areas and others are described in the findings, before conclusions and recommendations are put forward. The following describes the methodology and presents the findings, before providing a conclusion and recommendations.

Methodology

The Horizon Scanning (or scanning) method is a future-oriented research approach, that seeks out indicators of future opportunities and warnings of what might be to come (Amanatidou *et al.*, 2012). Known as 'weak signals' and 'insights' in scanning terminology, they "alert others to signs of change that could be sources of disruption" (Policy Horizons Canada, n.d., 6). Groups of signals, or insights, form 'clusters', or themes that have been analysed for their potential impact and significance. Resulting data is then used to assist in future-planning.

The particular scanning approach used here varied between researchers depending on the material being reviewed, but all loosely followed the approach as described by Amanatidou *et al* (2012):

1. *Development of a heuristic search profile using keywords;*
2. *General scan for signals;*
3. *Refined scan and review of data;*
4. *Preliminary assessment and selection; and*
5. *Clustering of signals.*

The most challenging aspect of this process is evaluation: which signals to retain, how to cluster them, and the worthiness of each resultant cluster. Evaluation was undertaken with the following criteria in mind:

- "Duration of weakness of signal, also associated with time at which signal is observed;
- Origin (stakeholder[s] behind them) and novelty of weak signals;
- Rising ethical, legal, societal and cultural issues;
- Existence of a strategy already concerned with specific weak signal(s) and emerging issues by a government or industry;
- Positive and negative impacts and associated policy implications; and
- Policy recommendations" (Amanatidou *et al.*, 2020, 217).

The findings for the five areas of analyses brought to the surface matters that are of greatest importance or urgency, requiring deliberation and inclusion in future planning.

The five areas of analyses comprised the following data:

- Situational analysis: the NSDP 2019 Indicator Report;
- Stakeholder consultations: 20 hours of audio recorded consultations with key stakeholders;
- Print, digital and social media: selected resources from the last 24 months, including *Cook Islands News* and *Pacific Media Network*, using the key terms 'Cook Islands' or 'Cook Islanders'. The social media part of this included *Twitter* and *Instagram*, scanned with the hashtag #CookIslands and key term 'Cook Islands', located mainly in the *Facebook* page 'Rarotonga – Community and Beyond'. Data was lastly drawn from a survey posted on the Office of the Prime Minister website; and
- Document review: data drawn from 51 pieces of academic and commissioned research undertaken in or about the Cook Islands over the last 24-month period; and
- NSDA 2020+ Forum: approximately 40 pages of notes taken at the break-out sessions of the *Our Cook Islands Legacy Agenda 2020+ Forum*. Participants were asked to share their views on issues facing three age groups, selected from nine age range options, from birth to 60+ years.

There are endless ways that data themes could have been organised for this report. Themes were developed for consistency across the different reports: each of the three researchers involved used their own sets of clusters or themes (refer to individual reports). While this makes sense for individual reports, in order to get a 'clearer' picture of findings it was important to consider the different ways that data from all reports could be drawn together in a meaningful way, and hence develop themes that are inclusive. A further factor to take into account was how to allocate signals to different clusters or themes: when the signal clearly aligned with more than one theme, it was included in more than one.

Research Ethics

There are no notable ethical concerns to be aware of for the purposes of this research. Materials used for analysis are from the public domain; there was no need to gain informed consent from participants.

Research Limitations.

Each researcher was limited both in scope and time. Researchers had approximately six weeks to undertake their research and write reports and were each allocated restrictions in terms of what data would be analysed in order to fit with the time frame available.

Some challenges arise from the scanning method. Firstly, it is a fairly subjective method in that the researcher must make decisions based on information available as to which signals to retain, and how significant they are. This issue is somewhat related to the term 'cultural contradiction' which refers to an issue that needs to be grappled with when looking for (weak) signals (Schultz, 2006). Schultz (2006) provides two different instances of cultural contradiction occurring: when gauging early or weak signals and possibilities, strategic thinking is required, but there is usually little firm evidence available to support any such claims. Second, the places where it is more likely to find such signals may not be in peer-reviewed work that would be the usual domain for finding evidence to support claims, but instead may be more located in more peripheral and less conventional (in an academic sense) contexts and mediums. With different resource types used across the four analyses summarised here, it is anticipated that 'cultural contradiction' will be less problematic.

While the scanning method is useful for detecting early signs of possible developments (Horizon Scanning, 2019), it can be further enhanced by incorporating other methods, such as scenarios (where possible futures are imagined based on different iterations of future events), which allows for differential planning and shock minimisation, and/or backcasting (envisioning desired outcomes and working backwards in order to define the steps needed to get to the desired goal)

(Fauré, Arushanyan, Ekener, Miliutenko & Finnveden, 2017; Mietzner & Reger, 2005; Miola, 2008). These would allow for more concrete planning and enable progress to be adapted to fit potential future threats that may thwart the steps currently being taken.

Research Team Positionality

The research team of three women includes two Cook Islanders, one of whom is currently living abroad, and a papa'a from Aotearoa. Each member of the research team contributes a range of experiences, knowledge and expertise. The team itself includes an 'outsider' perspective (of a papa'a), which brings advantages and disadvantages: the advantages include seeing "properties lost to the insider because of familiarisation" and the possibility of discovering "something of value to [the] hosts" (Bonner and Tolhurst, 2002, Table 1). Disadvantages include a limited ability to speak and understand Cook Islands Māori, therefore "cultural" or linguistic (jargon) distances" may "desensitise" the researcher to really understanding needs and meanings (Bonner and Tolhurst, 2002, Table 1). Teamwork in this situation has been key to ensuring that any unanticipated problems that arise could be worked through collectively to mitigate any disadvantages, while at the same time providing the advantage of a broader perspective.

Findings and Discussion

Five sets of findings are brought together for discussion. Categories are not mutually exclusive: they have been determined on a 'best fit' basis so that the clearest results can be presented, with signals oftentimes implicated across two or more of the themes, for example, technology and Cook Islands culture and heritage¹. Described first is the situational analysis as this is based on identifying gaps or weaknesses in the current National Sustainable Development Plan unlike the tasks undertaken in the other analyses, which was to detect new and emerging ideas. All four of the remaining analyses are presented collectively so that the most prominent themes are brought to the fore.

Situational Analysis

Ten clusters of signals were identified in the NSD 2019 Plan. These clusters are summarised in Table 1 below according to how many signals appeared across the 16 goals of the NSDP. Goal 16 ("Promote a peaceful and just society and practice good governance with transparency and accountability") has by far the most signals associated with it (n=24), followed by Goals 2 (involving work and the economy), 3 (sustainable practices), 7 (health) and 15 ("sustainable population engaged in development for Cook Islanders by Cook Islanders") (n=8 each). The following considers each cluster in term in descending order of most to least associated signals. Outstanding in this respect is the need for 'further information' (n=24), followed by 'environmental sustainability (n=13), then 'governance' and 'systemic issues' (n=10 each).

A central message evident here is that any future planning taking place where there are information gaps, will at worst be inadequate, and at best aspirational, as plans will lack a solid foundation. The information, monitoring and compliance 'gaps' that occur across multiple ministries and the public sector are of immediate significance for planning the NSDA 2020+.

Legislative amendments or reviews are needed in the area of environmental sustainability: 1) due to land development often occurring in coastal areas or areas formally used for crops; and 2) to review the necessity of, and monitoring for (if continued) purse seine fishing. More information is needed to: 1) better understand and protect vulnerable areas such as wetlands; 2) assess whether septic waste and sanitation upgrades have been completed; 3) assess progress with the shift to renewables in Rarotonga; and 4) better understand what is going on and plan for better recycling and waste

¹ An example of this is the robot 'Kuki', made by young Cook Island students, which has the capacity to clean up pollution.

management. Further resourcing is required for monitoring of protected species, coral cover, and water quality. Work is underway in a number of these areas, but slow to progress in others.

Good governance involves the presence of several key characteristics: 1) participatory; 2) consensus oriented; 3) accountable; 4) transparent; 5) responsive; 6) effective and efficient; 7) equitable; 8) inclusive (United Nations, n.d., 3). The findings of the situational analysis show weaknesses in a number of these including with Ministry of Justice operations and outcomes, compliance issues (particularly in the Pa Enua), along with land use and development planning, and resolving land claimant matters in a more cost-effective and timely manner.

There are a number of matters that could fall under 'systemic issues' - problems that exist at a system rather than individual level - and that subsequently, require systemic level change to address issues effecting groups of individuals. The NSD (2019) report indicates a range of systemic problems including poor lifestyle choices or practices, gender bias, and areas where further support, compliance, or even legislative change may be needed (for example, with population and Migration / migration and Government ministry performance).

Health and wellbeing issues in the Cook Islands are associated with poor lifestyle choices, structural constraints (such as health care limitations – infrastructural and fiscal; employment and post-secondary education prospects), and long-standing attitudes (toward mental health disorders and domestic violence). Of particular concern here is youth unhappiness, and the future implications of this at the individual level (e.g. suicide, depression) through to the wider population (continuing migration / population change).

A number of areas in the NSDP show infrastructural weaknesses that need addressing. These include: inclusive accessibility to public infrastructure, renewable energy in Rarotonga, water and sanitation, internet / broadband, recycling and waste, and transportation between the islands. The added infrastructural pressures of (until Covid-19) increasing tourism numbers is also noted.

Troubles with resourcing span several areas, notably health, education, environment, and justice – all key areas of government and critical to social wellbeing.

Inefficiencies in the workforce has meant that the Government's asset information software (Asset Finder) has not been utilised to its potential. A law change that placed a maximum age on those able to serve as Justices of the Peace (JPs) has resulted in a shortage of JPs. Government ministries and Public Services have noted issues with work standards, attracting and retaining a capable workforce (Samoglou, 2020). All these equates to inefficiencies, ineffectiveness, and a lack of accountability (key tenets of good governance).

Highlighted as necessary for economic sustainability are:

- increased government revenue (including from marine resources and improved VAT and income tax compliance);
- less reliance on tourism income;
- increasing Cook Islanders local investment;
- economic diversification;
- ensuring government assets and infrastructure are tracked and monitored; and
- fiscal preparedness in times of disaster.

Ensuring continuity in Cook Island Māori use, especially in younger people, gaining a clearer picture of how cultural activity engagement occurs, and continued resourcing for digitisation of cultural resources are matters raised in relation to heritage preservation and cultural continuity. Negative views of future opportunity in the islands from youth should also be flagged as potentially impacting cultural continuity in future.

TABLE 1 CLUSTERS WITH ASSOCIATED GOALS AND NUMBER OF SIGNALS PER CLUSTER AND GOAL

| | Goals | | | | | | | | | | | | | | | | T= |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| Further Information | | 1 | 2 | 3 | 1 | | 1 | 1 | 1 | | 1 | 3 | | 1 | 3 | 6 | 24 |
| Environmental sustainability | | 1 | 3 | 1 | | 1 | | | | 2 | 3 | 2 | | | | | 13 |
| Governance | | | 1 | | 1 | | | | | 1 | | | | | | 7 | 10 |
| Systemic issues | | | | | | | 2 | | 2 | | | | | | 2 | 4 | 10 |
| Health and wellbeing | 2 | | | | | | 4 | | 1 | | | | | | 1 | 1 | 9 |
| Infrastructure | | 1 | 2 | | 1 | 4 | | | 1 | | | | | | | | 9 |
| Resourcing | | | | | | | 1 | 1 | | 1 | 1 | 1 | | 1 | | 2 | 8 |
| Workforce / skills-base needs | | | | | 1 | | | 1 | | 1 | | | | | 1 | 3 | 7 |
| Economic sustainability | 1 | 1 | | | | | | | | | | 1 | 2 | | 1 | 1 | 7 |
| Cook Islands heritage and culture | | | | | | | | | 2 | | | | | 2 | | | 4 |
| Total signals per goal | 3 | 4 | 8 | 4 | 4 | 5 | 8 | 3 | 7 | 5 | 5 | 7 | 2 | 4 | 8 | 2 | |

Stakeholder Consultations, Document Review, NSDA2020+ Forum, Digital, Print and Social Media Scans

Taken together, the stakeholder and public consultations, document, digital, print and social media scans produced some strong findings – or signals of new and emerging ideas and concerns.

TABLE 2 NSDP THEMES COMPARED WITH SCANNING ANALYSES THEMES IN DESCENDING ORDER OF SIGNIFICANCE

| Situational analysis (NSDP) | Combined scanning analyses |
|------------------------------------|-----------------------------------|
| Further information | Economic sustainability |
| Environmental sustainability | (Human) health and wellbeing |
| Governance | Environmental sustainability |
| Systemic Issues | Education |
| (Human) health and wellbeing | Governance |
| Infrastructure | Cook Islands culture and heritage |
| Resourcing | Technology |
| Workforce / skills-based needs | (Cook Islands) Identity |
| Economic sustainability | Covid-19 |
| Cook Islands heritage and culture | Population / Migration |
| | Workforce / skills-based needs |
| | Infrastructure |
| | International relations |
| | Religion / spirituality |

| | |
|--|---------------------|
| | Resourcing |
| | Further information |

In total, 16 themes across the analyses areas are identifiable. These themes are presented in descending order juxtaposed against the weaknesses identified in the situational analysis of the NSDP, in Table 2 (previous page).

Determining the significance of the scanning analyses involved looking at the frequency of signals associated with themes and considering the strength of implications for each. Each of the themes are discussed in turn in the following. Appendix a provides list of signals for each theme, in the same order presented here, that is, from the most significant to the least significant theme or cluster.

Economic sustainability was the strongest theme with 81 signals located across the different analyses. There is a clear emphasis on diversification and economy enhancement, particularly by utilising internet and new technologies, and thinking ‘outside the square’ about possible innovations. In a different direction was a strong call for returns to traditions of self-sufficiency, as found throughout much of the Pa Enua, which at the same time contributes to a sense of Cook Island identity, culture and heritage.

A more environmentally sustainable economy was threaded through many conversations. This included introducing more sustainable or regenerative tourism (a tourism approach that is holistic, considering “the wellbeing of the entire ecosystem in which communities live” [Earthchangers, 2020]), and capping tourism numbers. Technology was seen as both a means for Cook Islanders to engage on a global level economically, and as a means to assist with local production marketing and as a ‘green/blue’ economy alternative to needing to travel (and increasing connectivity across the Islands and further abroad).

Seabed mining needs mentioning here as this was raised multiple times. It is seen as a possible financial saving grace for the Nation, but at the same time was viewed by some with trepidation in relation to environmental impacts and repercussions.

Ideas were presented on very different scales also: from growing localised, traditional industries, to shifting forms of capital activity toward ethical and direct shareholder investment². Many of the signals centred on needs or desired outcomes, including: subsidy requests, rental / land lease cost controls, workplace childcare and internship programmes. Plenty of ideas were forthcoming in discussions about how to progress economically in the future; but, with alarm signalled at times given the state of the economy due to the impact of Covid-19, it is unclear how it will be possible to address many or any of the desired economic outcomes in the immediate future.

Human health and wellbeing is an area that received a lot of attention, with 55 associated signals. Most vulnerable are children, youth, the elderly, young parents, LGBTQI, and those with mental health or other special needs. An overwhelming number of signals stated a need for more support services – counselling, safe spaces, groups and care facilities for example. Signals proposed the need for further infrastructure or activities to help occupy youth, and therefore deter anti-social behaviour bred, by example, through boredom. Youth furthermore reportedly experienced unhealthy and sometimes violent relationships with little or difficult to access support available. Concerns around sex education, harassment and abuse, increasing and changing crime levels, as well as addiction issues were all voiced; at the same time, the goal of zero-crime was proposed by a representative for

² ‘Ethical Impact Investment’ is where local communities have a part in determining where and how foreign investment would be best utilised for impact rather than profit (Birnie, Tierney, Smith, & Cribbens, 2018; Milne, Deuchar, Berno, Taumoepeau, Pusinelli & Raymond, 2017).

Corrective Services. Forster (2011, 91) notes that “traditional attitudes” can hinder efforts to progress further on these fronts without further top-down efforts to re-socialise people, so that matters of domestic / sexual violence, and mental health issues are taken more seriously and with more sensitivity. Signals pointed to the need to address the social drivers of many of the issues raised, such as addiction, violence or neglect.

As well as concerns, suggestions were made to help improve health and wellbeing, aside from more resourcing and infrastructure. The creative industry or arts were proposed as assisting in health and wellbeing as there is evidence, for example, of children achieving better results in their education if they are involved in the arts and it can also help with reducing stress, healing psychological wounds, increasing self-awareness and connections with our cultural heritage and traditions (MacGiollari, 2010; Ray, 2019); this evidence all suggests that creative activities would be conducive to a more peaceful society including crime reduction. Focussing on spirituality, meditation, and encouraging children to dream big’ were also suggested.

Environmental sustainability came in as a strong area of interest, concern, and of innovative suggestions, with 42 associated signals. Several areas were prominent in the findings: agriculture, seabed mining, climate change and waste / pollutants.

Shifting toward regenerative or environmentally friendly, sustainable agricultural production methods were favoured. Suggested in relation to this were looking after soil health, striving to be pest and invasive species free, and using traditional planting methods, while at the same time limiting the amount of imported goods and striving to live more sustainably like those in the Pa Enua. There were also concerns about developing policy for Living and Genetically Modified Organisms L/GMO, particularly as L/GMO plants could be seen as attractive in future given the possibility of their having benefits for climate change mitigation and other L/GMO technology having potential to eradicate disease-carrying mosquitos.

Discussion on the topic of seabed mining was fairly divided: some see it as an economic boost to the country – though there was concern expressed about where the benefits of monies raised would be allocated and how revenues would be handled, while others were concerned about the environmental impacts of this fairly novel practice taking place. It was described as potentially disastrous a number of times.

There is a lack of any policy around climate change mobility as part of adaptation. Concerns about climate change response were discussed by others, including concern that the Islands might all be under water in a century’s time and that there needs to be preparation made for the population to move to New Zealand, or that the Government needs to look at buying land overseas in preparation. Not all had a grim outlook: there was some positive discussion about how in the future the Cook Islands would be well positioned to assist other Pacific nations with climate change.

In summary, while there were some stand out areas: understandably agriculture given its importance for island life, and seabed mining given how topical it currently is, there were a plethora of other signals, from the desire for alternatives to flushing toilets, developing an ‘Eden’ in ten years, to creating systems for dealing with e-waste and linking to a zero-waste target.

Education was viewed as an area of great importance (n= 38 signals) given the opportunities that it can provide and the important role it plays in shaping the future of children and youth. It is seen as a panacea for many social and cultural ills: the formal education environment is where children can be taught Cook Islands Māori so that the population is 100% bilingual in time, where they can be taught more about cultural practices and tradition including knowledge of planting, fishing, medicine, and where education conducive to improved health and wellbeing, environmental awareness, and money management all take place. The creation of a Māori television channel, Māori apps or just making use of ICT technology more generally could assist in these endeavours.

Concerns were also expressed regarding children not being taught to adequately read or write when they finish their schooling, and that more teachers need degrees so that they can provide a better quality education. Suggestion was made that if people had to pay for their children's education that it would be taken more seriously.

Post-secondary education was not talked about as much as younger peoples' education, but suggestions were made for developing a medical university in the Cook Islands, universities in the Pa Enua, parenting education, and education on dementia.

The importance of educating young people to better prepare them for the future, and to ensure that the Cook Islands culture continues to be strong, is the stand-out message from the education theme. The call is strong for a localised and more practical formal school curricula, that strongly embeds Cook Island Māori language, and that teaches young people about their culture and traditions with life skills that would equip them well for more sustainable living in the Islands.

Governance matters were implicit throughout a lot of the findings / signals, while at other times were much more obvious. The governance theme is very wide ranging; common topics evolved around policy needs, land, international relations, and a range of other topics.

Some frustration was expressed in relation to the land system: calls were made for shorter leases, making more use of the land when not being used by owners, land decisions being made on the Island in question, and concern about overseas landowners' actions. In relation to international relations, there were calls both for further judicial independence (by way of establishing a Supreme Court in the Islands) and also concerns about needing to lose developed nation status so that development assistance might be more readily available. Fear was also expressed about needing protection from other countries that might be looking to exploit the Cook Islands.

Policy proposals were put forward advocating the building of a bilingual/multilingual nation, for Māori being spoken in court, and a review of fiscal policy to reflect ability to cope with climate and non-climate related disaster. Policy development was requested for addressing LMOs and GMOs, workers' rights, gender discrimination, climate change mobility, and a first home buyers scheme.

The governance theme contained a fair amount of critique of government and government bodies:

- public services were viewed as stuck in a 'business-as-usual' mode;
- a petition opposing chlorination was ignored by the Speaker of the House (from Dateline Pacific, 9 October 2020, print/digital media scan report);
- there was a lack of consultation over the helmet law; and
- Government needs to listen to its people and not be condescending.

Some points were made about the positioning of traditional leadership, and a call to decolonise current government policy was also made. In sum, governance matters are integral to a nation's wellbeing with matters pertaining to land and general policy gaps being most prominent.

Cook Islands Heritage and Culture discussion was mainly related to increasing levels of Māori language and literacy, the importance of retaining and passing on traditional knowledge and ways of living. Life in the Pa Enua was implied as more desirable in terms of utilising all the preceding. Altogether 29 signals are associated with this theme.

Most signals reflecting keeping culture alive today – with concern voiced regarding Cook Islanders being a dying race. A mix of other ideas were proposed, including the need to search for and develop archaeological sites that are referred to in oral and written history, and debates about traditional leadership, along with calls to return to a more Christian society.

Much overlap exists here with the 'education' theme, given the desire for all things Māori, and in particular language, be passed on using schools as a key institution for this work. While one lone signal suggested there is currently too much emphasis on culture and not enough on economy,

this was not the general sentiment expressed. Concerns about the loss of Māori culture and language and operationalising ways to avoid this are implicit throughout the signals; accordingly, maintaining and progressing Cook Islands culture is the key message in this theme.

Technology, and in particular the utilisation of Internet Communications Technology (ICT) and exploiting technology for market gain were widely discussed in this theme, constituting the vast bulk of technology-related discussion (n= 26 signals).

A sentiment of under-utilisation of technological / digital possibilities in this area was clear. With the removal of the telecommunications monopoly and the submarine fibre cable installed, discussion about digital economy opportunities are numerous. The internet was overall understood as a means by which to transform many key areas: health, education, governance and the economy. Many economic possibilities were identified: blockchain technology, crypto-currencies, offering virtual tours, or selling data storage for example.

With the enthusiasm for embracing a digital, online future, came warnings about the increased vulnerability to cyber warfare, resulting e-waste (which is already problematic to dispose of), ethics involved in distance education, a digital divide between Rarotonga and the Pa Enua, and how to educate a sufficient IT workforce.

Indications are that Cook Islanders are embracing all that ICT / digital technologies have to offer (e.g. the Cook Islands youth that developed Kuki the robot that can help clean up pollutants, and the Cook Islander TikToker who developed a song which became a global sensation in 2020). This is the direction that things are taking on a global scale, and it is the world that youth are growing up with, indicating that this is a vitally important area to consider and progress on for the future.

Other than ICT / digital economies, the only other technological mentions were in relation to the possibilities that Living or Genetically Modified Organisms (LMOs and GMOs) might offer, as well as a desire for agritech solutions that will mean not having to work as hard in the fields.

Of note is the seeming contrast in desires between a high-tech, online, digital future and a return to more traditional knowledge and sustainable ways of living. Negotiating a path between the two will be an important task for future planning.

(Cook Islands) Identity was discussed in a range of ways: the topical Pride Campaign / LGBTQI+ rights and implications drew a lot of discussion, and a variety of points were made regarding characteristics of who Cook Islanders and the Cook Islands are, or how they ought to be. A total of 22 signals were ascribed to this theme.

All comments made in relation to the Cook Islands Pride movement were supportive, with arguments made that to not decriminalise same-sex relationships would mean deterring tourists, having negative international implications, and being anti-constitutional. In a similar vein, was a call to decolonise gender toward more LGBTQI+ support.

Much honour was attributed toward a Cook Islands identity, with a strong desire to further a more unique and independent Cook Islands: there was discussion about sovereignty, changing the country's name, bilingualism, establishing Māori immersion schools and encouraging Māori to be spoken in the court system, while at the same time dispelling outmoded Western approaches and concepts. Along with asserted positivity in this area, were warnings that people suffer burn out from trying to do so much for church, work or sports, which can be attributable at least in part to the desire to try and make everyone proud. This area has important implications for policy making, governance, education, socio-cultural systems and relationships, and essentially all areas of modern life in the Cook Islands.

Covid-19 has put up a huge wall in terms of slowing the world down, which economically has been and is disastrous, but that at the same has provided space to really take stock of where we are at as individuals, communities, nations, and globally. This theme has 19 signals associated with it; it is worth

noting though that much of the material used in the analyses here were from prior to Covid-19, so it is reasonable to presume that had analyses data been limited to 2020 only, that this theme would have elicited a lot more signals.

Clear messages in this theme are that tourism will change, that mental health impacts are more apparent (though one signal suggested that there have been no conversations about mental health during the pandemic), and a raft of economic-related fears (though a lone voice noted improved business since Covid-19). Covid-19 has highlighted the need too for better support services for mental health, given there may be ongoing stressors for some time to come given the pandemic. Financially, fears about Government not being able to fiscally cope with another disaster, such as a cyclone, have been ignited. A sentiment also comes through that measures taken to keep the Cook Islands Covid-19 free have been a bit too severe given the economic repercussions.

The significant impact of Covid-19 on peoples' lives around the globe is obvious, as it is here in the Cook Islands. Economic development and planning need rethinking and inadequacies in mental health support and services must be addressed.

Population / migration mainly relates to ideas about the relationships and place of Cook Islanders and foreigners³ in this country, and Cook Islanders overseas; they are two separate but intertwined concepts. This area is one of the more divisive, as clearly shown by the range of positions taken among the signals in this theme (total number = 15).

Fear that Cook Island Māori are becoming a minority in their homeland were expressed by some, a fear that has increased with changing Migration laws that may allow more migrants to reside in the Islands, and due to increasing numbers of intermarriages over recent decades. Concern that more Cook Islanders will leave if the borders do not open have been exacerbated by Covid-19.

An empathetic view was expressed in relation to situations where children of migrants that have grown up in the Cook Islands, knowing no other home, still do not have any right to live in the Islands. Also stated was that migrants should have Cook Island values installed in them, and that some migrants do not obey the laws of the country.

Cook Islanders living overseas were discussed to a limited extent, with the question posed of whether the Cook Islands would be ready if the New Zealand and Australian governments (where 100,000 plus Cook Islanders live) decided to send all Cook Islanders home. Some dissatisfaction was expressed also regarding Cook Islanders living and paying their taxes overseas, but still enjoying all the rights of being a Cook Islander when they return to the country for holidays.

The divisive nature of signals in this theme does unfortunately promulgate, as one comment suggested, an 'Us versus them' mentality. While such discussions can be an interesting catalyst for policy planning, this can also fuel racism, xenophobia, violence and a lack of respect for human rights. Gianmarco and Ottaviano (2006) describe how studies have shown diversity in beliefs, opinions and influences can have positive effects on productivity, creativity, problem-solving and economic growth, but diversity in experience, expertise, ethnicity, gender and sexual orientation can manifest discomfort and even conflict.

The friction that clearly exists when it comes to foreigners versus Cook Islanders, is not a healthy undertone for any society, and yet it is increasingly evident in nations all over the global as populations become more transient. This theme is an interesting one to consider alongside the 'work / skills-based need' theme that follows.

Workforce / skills-based need signals turned up both problems and possible solutions (total number of signals = 14). Broadly speaking, there was some concern about workforce / skills standards in public services, those working with policy, and with teachers and nurses. Further education, internships, and a better, more incentivising pay scales were requested. Alongside noted workforce / skills-base

³ Please note that when the term 'foreigner/s' is used that it is inclusive of all expatriate workers and investors.

concerns, was a suggestion that Cook Islanders should occupy all senior levels, and that Cook Islands judges could be trained in 25 years.

Education was raised in relation to ICT: if ICT / digital is the future direction then there needs to be a workforce trained for it, while others suggested an international network connecting Cook Islanders living in the Islands and overseas to share expertise and provide technical assistance. It seems that addressing workforce / skills base gaps cannot currently be fulfilled by Cook Islanders alone – one signal stated that the work foreigners are doing is that which locals do not want to do; further, or post-secondary education appears necessary to assist with upskilling the workforce.

The importance of this theme, aside from the obvious - that a skilled workforce is necessary for work to be undertaken to a high standard with positive outcomes - are the links with education needs, population / migration issues, and a positive and 'well' younger generation that want to stay in the Cook Islands and that see opportunities here for them in the future. As aforementioned, it would be worth having a discussion about population in terms of workforce / skills-based needs, and where and how foreign workers could be best placed: firstly, to work where there is a need for skills and experience that are in short-supply on the Island, and assist with training locals where possible and appropriate; and secondly, to consider what an 'ideal' population demographic would be in the Cook Islands with regard to foreigners and locals, given that this is a point of tension. Directly addressing these population / workforce / Migration related tensions would go a long way toward improving health and wellbeing for all.

Infrastructure signals cover a range of areas (n = 14 signals). Areas include:

- Transport (possible amphibian aircraft, unmanned flight or drone transport being used for interisland transport, freight and emergency response);
- Internet (providing free internet to promote development and improved connectivity in the Pa Enua);
- Water (not wanting to have to pay more for the water system in Rarotonga);
- The need for rehabilitation services and infrastructure to help allay boredom in youth;
- Day-based care or full-time care facilities for elderly (especially those with dementia); and
- Workplace childcare centres.

Concerns were expressed about any waterfront developments (such as a skateboard park aimed at youth), being potentially destroyed in the event of a cyclone, and the need for further water infrastructure work in flood-prone areas of Rarotonga (which has been occurring).

A number of these infrastructure signals relate to care and wellbeing: of children, youth and elderly, which in turn relates to improvements in health and wellbeing with anau and community-wide benefits. Transportation solutions are also a standout here: while financing such solutions might be initially challenging, these alternatives may be worth exploring as cheaper, more environmentally friendly and efficient future possibilities in the long term.

International Relations discussions recognised the special relationship between the Cook Islands and New Zealand, and also saw determination that the Cook Islands become a more independent nation, particularly in terms of trade and less reliance on New Zealand for development assistance (associated conversations can be found under the 'economic sustainability' theme).

A total of 13 signals are allocated to this theme. Views calling for more independence included:

- a need to address power imbalances with larger nations in order to benefit national wealth in the Cook Islands and help achieve other interests;
- questioning why foreign mining companies advise on Cook Islands seabed laws;
- a need to phase out aid support from New Zealand;

- a need to address the trade deficit with New Zealand by negotiating preferences for fruit and vegetables;
- a view that the Cook Islands could have its own navy in 25 years; and
- Relooking at the position of Head of State

Other comments referred more to constructive and interdependency relationships: the call from New Zealand for seasonal workers from Pacific nations including the Cook Islands, the assertion that the Cook Islands needs protection from other nations looking to exploit it, the statement that Cook Islanders are players on the international stage, and the importance of working in partnership with other countries to help climate change.

In sum, most international relations signals revolve around economics and trade. International relations have been important for the Cook Islands for some time – notably since 1888 when the Cook Islands became a British Protectorate – and in a rapidly changing and uncertain world, international relations will need to be negotiated carefully so that long term aspirations for the Cook Islands can flourish rather than be repressed. Whether to seek independence from, or continue the relationship that the nation has had with New Zealand (The British Crown) for well over a century is a key question of this theme, that has strong links to the (Cook Islands) Identity theme.

Religion / spirituality is an area seen to offer both possibilities and constraints. Some people proposed a return to a nation of Christian values while others advocated a separation of church and state. In some ways, religious doctrine was viewed as a hindrance to more open conversations and education around sexual health and sexuality, while others saw it as a positive influence in the criminal justice system as “God is [always] watching”. Concern was expressed about stigmatisation of those with disabilities, worsened by the view of church’s seeing those with disabilities as a curse on families. A positive perspective was proposed for an increased focus on spirituality and mediation to help reduce social problems and encourage affirmative vision and growth. While just 8 signals appear in association with this theme, the area of religion and spirituality has become significant over the past 200 or so years in Cook Islands society. There are however tensions here, probably expressed best with one of the signals that hoped to see religion as a thing of the past in relation to politics, that is, advocating for the separation of church and state in comparison with another signal expressing that laws should be based on the word of God.

Resourcing improvement needs are evident across a range of areas, including with supporting victims of domestic violence and those with mental health concerns. The need for further resourcing was implied in many suggestions made, though was not as often raised specifically as something to be addressed in order to make desired changes happen. One example is the suggestion of a first home buyers scheme, which would likely receive a lot of support as an idea, but which requires a lot in terms of fiscal resourcing. As is the case with sparsely populated countries around the world, resourcing need is an ongoing challenge. Based on the signals in this theme and in relation to others, resourcing towards improved health and wellbeing of the population is a most pressing need.

Further information was significant for the analysis of the existing NSDP, but was not raised anywhere near as frequently in the other analyses presented here. Just four signals are applicable to this theme. These are the need for further:

- study to understand the overrepresentation of males with recidivism, prison and violent crimes;
- information about the wellbeing of those in the 0 – 3 year old age group;
- information about alternatives to flush toilets; and
- time to adequately collect data for a better assessment of risks associated with seabed mining in the Cook Islands.

These four signals can be viewed alongside the ‘further information’ needs outlined in the ‘Situational Analysis’ Report.

Conclusions

This report has provided a synthesis of the extensive scan of multiple information and research sources that represent diverse Cook Islands voices. Analysis of the current NSDP found progress being made in many areas, while others were lacking: further information, monitoring guidelines, resourcing and time are needed to address many of these shortfalls. Nevertheless, a range of positive and exciting ideas have been put forward by the various individuals whose ideas, opinions and research have been used across the four areas of analyses where signals of what is to come, wanted and hoped for are identified. Alongside these indicators were those voices posing concerns and projecting warnings and fears. Covid-19 has only exacerbated many already existing issues such as the over-reliance on tourism and the burden on tourism activities on the environment and infrastructure, along with a lack of accessible services to support the more vulnerable. The recommendations that follow are based on the most compelling and significant findings toward development of the NSDA 2020+.

Recommendations

Recommendations fall into two main categories: those related to methodology, and those based on analyses of findings.

Methodological recommendations:

1. Outliers identified in scanning analyses should be included given that while they may seem dubious at first, they may prove to be valuable indicators for anticipating shifts in thinking and actions;
2. Team work undertaken using the horizon scanning approach would benefit from using the same template and heuristic search terms in the first instance to allow for more consistency in identifying and presenting findings;

Findings recommendations:

3. Further information must be garnered in order to adequately address shortfalls and weakness in the current NSDP so that there is a solid basis for forward planning in the NSDA 2020+; and
4. That further work as appropriate be undertaken to address concerns raised and pursue opportunities presented as per research findings and discussion.

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Appendix A

| Economic sustainability signals (Total = 81 signals) |
|----------------------------------------------------------------------------------------------------|
| Fibre optic cable to facilitate new economic opportunities e.g. blockchain technology (n=2) |
| Spirit of self-sufficiency means no need for government support |
| Develop islands to be self-sufficient in terms of agriculture |
| Need home gardens, seedlings and community support |
| Goal of being import-free |
| Develop agriculture in Pa Enea due to land running out in Rarotonga |
| Develop a gaming industry to employ more people |
| Primary resources are abundant; money is not |
| E-commerce to preserve traditional crafts in the Pa Enea |
| Need marketing assistance to preserve and promote traditional craft in Pa Enea |
| Create a marketable model for traditional knowledge and medicine |
| Offer health tourism i.e. surgeries |
| Data and information banks as economic opportunities |
| Digital nomad populations could be a target for tourism |
| Need to eliminate personal debt and change the kaiou culture |
| Cook Islands could become a creative industry hub |
| Set up innovation hub / incubator that offers grants for businesses and entrepreneurs |
| Finance technology as a way to create new markets e.g. digital wallets, investment aps. (n=2) |
| Māori immersion schools grounded in science will improve economic resilience |
| First home buyers scheme |
| Seabed mineral mining will create a thriving society |
| Seabed mining is not a gamble / is an educated gamble |
| Covid-19 exacerbated threats around cyclones because there are no reserves left |
| Need to lose developed nation status as soon as possible |
| Could see mass redundancies in wake of Covid-19 |
| Concern that Cook Islands may get involved in risky money-making ventures due to Covid-19 |
| Cook Islands would be prime real estate for non-Cook Islanders |
| Tourists could be put off visiting Cook Islands if same-sex relationships not decriminalised (n=2) |
| Fisheries have not had their full economic potential tapped |
| Tourism will never be the same (post-covid) |
| Covid-19 has provided an opportunity to look for new tourism models |
| Need to develop 'slow' sustainable tourism in Cook Islands |
| Careers can be found in the expressive arts, such as theatre |
| Covid-19 has provided the opportunity to plan for tourism in the Pa Enea |
| Cook Islands could have film and writing festivals |
| Seabed mining going ahead even though it could be environmentally damaging |
| Economy has been sacrificed in order to remain Covid-19 free |
| Business rights being restricted due to Covid-19 |
| Economic potential in growing marijuana |
| Become an IT hub |
| Great potential in e-commerce (n=2) |
| Potential to become leaders in CBD production |
| Limit the number of tourists allowed on the island at a time (n=2) |

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| Offer virtual tours of the Cook Islands |
| Introduce a user-pays system for public services with community services card for those that cant afford services |
| Introduce green engineering to mitigate impacts of development |
| Support 'design' thinking as an areas for Cook Islanders to break new ground |
| Need to reduce government debt (n=2) |
| Need a business hub incubator |
| There is a need to equalise power asymmetries between Cook Islands and other countries in order to create more wealth (n=2) |
| Move to a more sustainable or regenerative model of tourism (n=3) |
| Encourage foreign direct investment |
| Look at shift in type of economy: toward direct stakeholder investment (stakeholder capitalism) |
| Expand cottage industry exports |
| Create and ICT-centric Cook Islands: digital society, but will mean increased cybercrime |
| Current agricultural model of supplying mainly to tourism market is inflexible and narrow for world impacted by Covid-19 |
| Agricultural industry needs to account for changing lifestyle demands e.g. organics, veganism |
| Time for Cook Islands to change from extractive to sustainable market model |
| Other nations are valuing their natural resources – need to look at blue and / or green economic approaches |
| Public concern about whether current fiscal policy can manage both climate and non-climate related disasters |
| Need more innovation to drive economic values |
| Need internship programmes in disciplines other than the trades |
| Need incentivised pay scales |
| Focus on university and less on trade vocations to create more jobs |
| Need more useful internships, not just for cheap labour |
| Remember that Cook Islanders are players on the international stage |
| Vision has too much culture, and not enough economy |
| Need subsidies for reusable diapers and formula milk |
| Need workplace creches / childcare centres |
| Need support for accessing scholarships to universities beyond NZ and Fiji |
| Need price control on rent and land leases (n=2) |

| Human health and wellbeing signals (n= 55) |
|----------------------------------------------------------------------------------------------------------------------------------------------|
| Concerns expressed about the problem of Meth on the island |
| Need more infrastructure / activities for teenagers as they more likely to drink or steal when they are bored, e.g. a skate park (n=3) |
| Need improvements with sex education as a counter to the negative impacts of pornography |
| Addiction is a growing problem; addiction services are needed (n=3) |
| Cannabis should be legalised |
| Promote mainly plant-based diets |
| Need to focus on social determinants of ill health e.g. poor parenting or abuse |
| Long term impacts of Covid-19 could lead to increased anxiety and depression from financial stress: mental health needs more attention (n=2) |
| Covid-19 has adversely affected vulnerable communities which could have long-term impact |
| Need to teach children to 'dream big' |
| Need long term goal of nobody in prison and zero crime |

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| Head-hunters from overseas come to the Cook Islands looking for gang members |
| More females are stealing in order to feed their families |
| There is a probable increase in white collar crime occurring |
| Churches promote the idea that those with disabilities are a curse on the family |
| A need to focus on spirituality and meditation to reduce social problems and encourage vision and growth |
| Need skilled teachers and nurses for children with disabilities (n=2) |
| Consider a 4-day working week so that there is more time for other commitments e.g. family and community. |
| Need better care and opportunities for children in the Pa Enua, who are more vulnerable to natural disasters |
| Hospitality industry risks losing staff due to sexual harassment, which impacts the sense of safety and security, especially for female workers |
| Most youth experience unhealthy and often violent relationships and sexual experiences, and support services are difficult to access |
| Youth and LGBTQI people need confidential, safe spaces for sexual health testing, advice and counselling. |
| Social attitude of ageism directed toward the elderly is a problem in the Cook Islands |
| Social discrimination is occurring |
| Vision of future should be based on liberty and freedom |
| Support for dementia needed |
| Need to better equip and support parents (n=3) |
| Need support for youth who are living with and looking after older caregivers |
| Shortage of support / activities for kids, that are safe and engaging |
| Need mentorships |
| Underemployed parents = children living in poverty = violence and neglect |
| Need qualified educators for disabled children |
| Need support groups for postnatal depression and stress from raising child with disabilities |
| Need counselling for people moving back to the outer islands |
| Need support for teen / young mums |
| Need mediation support |
| Need daycare services for children with disabilities |
| Need a facility for elderly people |
| Integrate traditional knowledge into health programmes including vaiarakau and school curricula for well-being in spirit and body |
| Share pamphlets at Rehab nightclub on parenting the parents |
| AA is defunct |
| Should be allowed to play (not just work) |
| Need male specific services |
| Raise awareness on mental illness and stigmatisation |
| Support services for women going through menopause |
| Meals on wheels in the Pa Enua |
| Develop islands to be self-sufficient in terms of agriculture – alleviates burden of NCDs |

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| Environmental Sustainability signals (Total = 42) |
| Need sustainable, carbon reducing regenerative agriculture (n=2) |
| Need sustainable, regenerative tourism |
| Need crop bank to be established |

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| Need for courses in traditional eco agricultural planting methods |
| Need organic planting programmes |
| Need to record and learn from sustainable and adaptable models of living on atolls |
| Living and genetically modified crops could provide more sustainable means of food |
| Need to explore climate change mobility and be prepared to move (n=2) |
| Need to look at buying land in other countries because of climate change |
| Concern that what is called organic food is not really organic because of what may be in soil |
| Need goal of pest-free agriculture |
| Need to develop agriculture in Pa Enua because land is running out in Rarotonga |
| Important to work with partner countries so that the Cook Islands can be better positioned to deal with climate change |
| Need government charging stations for electric vehicles |
| Need to consider e-waste issue if moving toward more ICT in the Cook Islands |
| Need to build a crematorium as running out of land on Rarotonga |
| Need better environmentally friendly toilet solutions than flush toilets |
| Need zero waste goals |
| Need zero invasive species goals |
| Need to maintain good soil health in light of potential food crisis in South Pacific due to Covid-19 |
| Seabed mining concerns – a gamble / educated gamble |
| Seabed mining is a risk that government is taking due to financial problems from Covid 19 |
| Cant worry too much about things you cannot control such as what others do in relation to climate change |
| Concerns about seabed mining causing environmental disaster (n=4) |
| Concerns about how government will deal fairly with seabed mining |
| Opposition to chlorinating the water in Rarotonga |
| Climate change could wipe out waterfront developments |
| Pressures from seabed mining industry will be felt as they want to invest if they cannot get a return |
| Opposition to sewerage going out into ocean |
| Use green engineering to help mitigate negative aspects of development |
| Should be guided by people in the Pa Enua who live with the environment rather than trying to change it |
| Could turn the Cook Islands into an Eden in 10 years |
| Cook Islands should be known as a ‘garden community’ known for nature walks |
| Should strive for mostly plant-based diets |
| Aim to be 100% plastic-free |
| Look at introducing unmanned flight / drone transport utilising alternative / less energy |
| We cannot achieve a pristine environment: ‘setting us up to fail’ |

| Education Signals (Total number = 38) |
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| Concern that children are coming out of schools unable to read or write |
| Argument that people will value education more if they have to pay for it |
| Goal for every Cook Islander to be speaking Cook Islands Māori in 100 years |
| Call for a localised curricula that integrates traditional knowledge in the education system (n=2) |
| Puna could be developed into clinics for home-based learning for parents about parenting, relationships etc |
| Pilot a full Māori-immersion school (n=2) |
| Develop apps to enhance local curricula for more environmental education is available |

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| Develop more Māori apps for kids |
| Need to teach money management |
| Education system needs practical application (shift away from exams) |
| High value in teaching children to grow and catch food (n=2) |
| Need organic planting programmes |
| ICT technology enables every goal including e-learning opportunities (n=2) |
| Religion in education is not always a true reflection of God |
| Call to teach Pukapukan language in New Zealand schools |
| There is a need for education about dementia as it is increasingly prevalent in the Cook Islands |
| Sex education should be used as a counterweight to negative impacts of pornography |
| First Palmerston resident to complete a certificate with all studies completed at USP |
| Cook Islands Robotic Club being revived to teach young people coding, app building and web development |
| Call for modern schools that are more interactive and in line with job opportunities |
| Could have universities on outer islands: people from around world would recognise individual strengths and culture history |
| Could have a medical university in the Cook Islands: a health care system equal to or above New Zealand |
| Teachers should have degrees so that they are skilled and competent, offering quality teaching |
| Need to teach children to 'dream big' |
| Create a drive to achieve |
| Integrate all dialects into education systems |
| Create internship programmes (n=2) |
| Focus on university and less on trade vocations |
| Need qualified educators for disabled children |
| Need tech curriculum in high school |
| Need free educational workshops on parenting |
| Share pamphlets at Rehab nightclub on parenting the parents |
| Need support for accessing scholarships to universities beyond NZ and Fiji |

| Governance Signals (Total number = 33) |
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| Public services were said to be stuck in a 'business-as-usual' approach |
| Lack of any action plan or targets regarding Living or Genetically Modified Organisms |
| Need a policy plan for addressing climate change mobility matters |
| Policy, procedure and training gaps exist for workers' rights and countering gender discrimination |
| Need to review fiscal policy and ability to cope with climate and non-climate related disaster |
| Call for policy change that builds a bilingual nation |
| Concern that there are people working in policy who do not understand it |
| Call for Māori language to be spoken in courts |
| Suggestion that there should be a first home buyers scheme |
| Need zoom centres to improve nationwide governance, particularly connecting with Pa Enua |
| Suggestion that the Cook Islands should have its own Supreme Court |
| Laws, regulations and land decisions should be made on the island concerned, not outside it |
| Petition opposing water chlorination submitted to parliament was ignored by Speaker of the House |
| Concerns that there was a lack of public consultation over helmet law |
| Need to lose Cook Islands developed country status; fears over losing development assistance |

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| New Cook Islands political party claims it does not do favours but listens to people and addresses concerns about Chinese influence, poor public service and arrogant government |
| No legal watchdog in the Cook Islands |
| Government needs to listen to its people and stop acting like people are annoying and know nothing. |
| Argument about position of Koutu Nui in relation to Ui Ariki |
| Overseas landowners do not recognise leaders, and their actions cause disharmony in families and communities |
| Fear that too much authority will be given to minister responsible for seabed mining law |
| Absentee landowners are increasingly selling to the highest bidder, more than ever before |
| Need protection from other countries looking to exploit the Cook Islands |
| Suggested that land leases be cut back to 15 to 30 years, so the land stays in the hands of Cook Islanders |
| Government policies should be decolonised |
| Proposal that when families do not live or work on their land for a certain period per year, that it should be available to other families |
| Need to reduce government debt so that Cook Islanders are not in danger if things are not paid in time |
| Should be a separation of church and state; religion should not be involved in politics |
| Laws should be based on the word of god – Jesus was inclusive |
| Gender equality in Parliament and local government |
| Suggestion of a northern group hub for services e.g. health |
| Regulate / price controls on housing rentals and land leases (n=2) |

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| Cook Islands Heritage and Culture Signals (Total number = 29) |
| Call to teach Pukapukan language in New Zealand schools |
| Covid-19 WhatsApp channel developed in Cook Islands Māori in New Zealand |
| Support for traditional medicine as “not so primitive” |
| Avaroa Cable seeking a ra’ui offends traditional leaders |
| Minister George Angene says Koutu Nui should be under the authority of the House of Ariki |
| Film highlights understanding of food security and conservation knowledge of Pukapukans |
| Trying to define who is a Cook Islander legally is to think in non-Māori way (as opposed to papa’anga) |
| Call for legacy of recognising God in everything – return to values centred on Jesus Christ |
| Be guided by people of Pa Enea who live with the environment rather than try to change it |
| Tivaevae taorei technique is identical to the principles of coding |
| Call for a bilingual nation |
| Develop more Māori apps for kids |
| Integrate all dialects into education systems |
| Concerns that culture is going down, so cultural “antennas [are] up” |
| Culture seen as a barrier when parents do not like their kids to be taught to ask questions |
| Goal for every Cook Islander to be speaking the language in 100 years |
| Pilot a full Māori-immersion school |
| Incorporate traditional knowledge and medicine into marketable model for Cook Islands as a wellbeing destination |
| Māori should be spoken in court |
| Concern that Cook Islanders are a dying race |
| Need to get back to basics – saving traditional knowledge base |

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| Māori language should be first; English second. |
| Call for a 4-day working week to accommodate family and community obligations |
| Traditional knowledge systems courses for eco agriculture |
| Locals using indigenous approaches to ICT, increasing its use in education and culture, and rejecting Western approaches |
| Need to record traditional knowledge and practices of atoll living under changing circumstances |
| Need to continue searching for archaeological sites discussed in oral and written history |
| Integrate traditional knowledge such as vairakau into health programmes and school curricula |
| Vision has too much culture and not enough economy |

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| Technology Signals (Total number =26) |
| A digital economy provides many opportunities e.g. blockchain, digital tax (n=2) |
| Virtual reality is the future |
| Agri-tech can help us work less – desire not to see children having to work hard out in the fields |
| Digital festivals (e.g. Te Maeva Nui) could provide an economic opportunity |
| Video technology would bring the Cook Island diaspora home e.g. facilitate exchanging knowledge, linkages etc |
| Data and information banks could provide an economic opportunity |
| Finance technology to create economic opportunities, e.g. digital wallets, investing apps. |
| ICT technology enables every goal e.g. agri-tech, e-learning, office automation, e-health... |
| Warning that cyberwarfare is already here |
| Need to consider e-waste, ethics and distance education, digital divide (Pa Enua and Rarotonga), how to educate an IT workforce etc |
| Covid-19 WhatsApp channel developed in Cook Islands Māori in NZ |
| There is an enhanced need for cybersecurity |
| Cook Islander's song was used in 32 million online videos, streamed 32 million times becoming one of the most popular TikTok songs of 2020 |
| Cook Islands youth compete in robotics Olympics with Kuki, the robot that can help clean up pollutants |
| Revival of Cook Islands Robotics Club to teach young people coding, app building, web development |
| Cook Islands should become an IT hub |
| Offer virtual tours of the Cook Islands |
| Promote online business |
| Promote an e-industry |
| Cook Islands should be ICT-centric – completely digital society |
| LMOs and GMOs could assist in mitigating climate change by providing alternatives to hydrocarbon fuels |
| Apps should be developed to enhance local curricula for environmental education |
| Develop more Māori apps for kids |
| Should have a tech curriculum in high school |
| [be a] high tech Elon Musk |

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| (Cook Islands) Identity Signals (Total number = 22) |
| Pope's support for same-sex unions boosts Cook Islands Pride campaign |
| Pride Day counters ban on homosexuality |
| Publicity around criminalisation of same-sex relationships will deter tourists / have international implications (n=3) |

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| Bill expanding criminalisation of LGBT sex may violate constitution (n=2) |
| Continued criminalisation of gay sex is very disappointing |
| Fundamental human rights are under negotiation (re homosexuality reform) |
| It is time to decolonise gender – support LGBTQ |
| Law is trying to supersede papa'anga to define who is a Cook Islander |
| Call for Cook Islanders to acknowledge God in everything – a nation centred on Jesus Christ (n=2) |
| Cook Islanders as having born ingenuity – suited to design and solving complex problems |
| Call for the Cook Islands to have a new / Māori name |
| Theme amongst Cook Islanders of having to make everyone proud – which can lead to burnout |
| Spirit of self-sufficiency in the outer islands |
| Should be a bilingual nation |
| The Queen should not be the Head of State |
| Cook Islands people and knowledge should be valued with Cook Islanders occupying all senior levels |
| Call to discard Western concepts of identity and replace them with local concepts e.g. Cook Islands as a Large Ocean State |
| Locals using indigenous approaches to ICT and rejecting Western approaches |
| Remember we are players on the international stage |

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| Covid-19 Signals (Total number = 19) |
| Local growers are being encouraged to maintain soil health amid fears a food crisis could ensue in the Pacific |
| More Cook Islanders have been accessing health services as a result of Covid-19 |
| Pacific fashion designer has experienced business improvements since Covid-19 |
| Covid-19 exacerbates fear of cyclones and climate change as there will be no fiscal reserves left (n=2) |
| WhatsApp channel provided latest Covid-19 information in Pacific languages |
| Cook Islands see mass redundancies in wake of Covid-19 |
| Cook Islanders could flee to NZ if borders remain closed |
| Pacific Islands looking at risky money opportunities as they are desperate after Covid-19 |
| Tourism will never be the same again |
| Covid-19 means an opportunity to plan for Pa Enua tourism |
| The island sacrificed its economy to stay Covid-free |
| Rights are being unreasonably restricted due to Covid-19 according to a business leader in the Cook Islands |
| No conversations about mental health during global pandemic |
| Covid-19 has increased the number of students and teachers needing support for anxiety |
| Reactive puna as clinics for educating parents |
| Cook Islands are search for alternative tourism models following the impact of Covid-19 |
| Growers livelihoods impacted as produce mainly supplies tourism market; current model too narrow and inflexible for world impacted by Covid-19 |
| Covid-19 adversely affected vulnerable communities which can resonate into the future. |

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| Population / Migration Signals (Total number = 15) |
| Need to be prepared for when New Zealand and Australian governments decide to send Cook Islanders home |
| Future of nation filled with people that are not Cook Islands |

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| Comment that some migrants are not respecting the laws of the country |
| Cook Islanders should be ready to move to NZ because the Islands will be under water in 100 years |
| Video technology can help bring diaspora home through linking people, exchanging knowledge etc |
| A need to install Cook Island values in migrant population |
| Fear about changing demographics as intermarriages with foreign workers have been occurring in the last couple of decades |
| Cook Islanders fear new Migration laws in case Cook Islanders become outnumbered |
| Growing migrant workforce over the last 10 years means young kids grow up knowing the Cook Islands but have no right to remain here. |
| If borders remain closed due to Covid-19 Cook Islanders could flee to New Zealand |
| Cook Islanders fear that new laws will increase the number of migrants allowed in the country |
| Growing elderly population in the Cook Islands – increasing risk of dementia |
| Cook Islands as prime real estate for non-Cook Islanders |
| Criticism of overseas Cook Islanders paying taxes in another country but expecting to come back to CI and enjoy same rights as those living here. |
| Concern about the divisive nature of commentary around Migration and what defines a Cook Islander: us versus them mentality |

| Workforce / Skills-based Need Signals (Total number = 14) |
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| Comment that the work foreigners are doing in the Cook Islands is the work that locals do not want to do |
| There are people working in policy that do not understand it |
| Cook Islanders and Cook Island knowledge should be valued: Cook Islanders should occupy all senior levels |
| If pursuing and ICT future, need to consider the education of an IT-ready workforce |
| Could train Cook Island judges within 25 years. |
| Need teachers with degrees, that are skilled and competent teaching in Cook Island schools |
| Public Services are stuck in 'business-as-usual' – need an innovative public |
| Need to change standard of education in Cook Islands to help drive innovation or connect with Cook Islanders living overseas |
| Develop online international network of professional Cook Islanders that can be called on for technical assistance / expertise |
| Need skilled teachers and nurses for children with disabilities |
| Professional development for healthcare staff to identify early signs of disabilities in infants |
| Need more internships (n=2) |
| Incentivised pay scales |

| Infrastructure Signals (Total number = 14) |
|--------------------------------------------------------------------------|
| Could have amphibian aircraft flying to the Pa Enua |
| Value in providing free internet: means of facilitating development |
| Cook Islands company to bring uncapped data to Pa Enua |
| Cook Islanders should not pay any more for the Rarotonga water system |
| Need for rehabilitation services |
| Need to build infrastructure to help keep bored youths out of trouble |
| Need to consider some kind of day care service for elderly with dementia |
| Need a facility for elderly people |
| Need workplace creches / childcare centres |

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| Government waterfront project lacks awareness of climate change – could be wiped out by a cyclone |
| Infrastructural work needed in flood-prone areas of Rarotonga |
| Need high-speed internet connectivity in the Pa Enua |
| Suggestion that unmanned flight /drone transport be useful for interisland transport |
| Suggestion that unmanned flight / drone transport be useful to freight essential items and be used for emergency response |

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| International Relations Signals (Total number = 13) |
| Need to equalise the power asymmetry in international relations with larger countries in order to benefit national wealth (n = 2) |
| Using a triangular approach in equalising power asymmetries with other nations could help the Cook Islands achieve its interests |
| Need to phase out Aid Core Sector Support from New Zealand |
| Need to equalise the trade deficit with New Zealand by negotiating preferences for fruit and vegetables |
| Large scale power competition in the South Pacific impacts the Cook Islands aspirations for regionalism and regional security |
| Call for New Zealand to turn to Pacific nations for more seasonal workers |
| Question posed regarding why foreign mining companies advise on Cook Island seabed laws |
| Need protection from other countries looking to exploit the Cook Islands |
| Important to work in partnership with other countries to help combat climate change: Cook Islands will be well position to help Pacific in 100 years. |
| Queen of England should not be the Cook Islands Head of State |
| Cook Islands could have its own navy in 25 years (linked to sovereignty) |
| Remember we are players on the international stage |

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| Religion / Spirituality Signals (Total number = 8) |
| Spiritual values are important in the criminal justice system because “God is watching” |
| Churches promote the idea that those with disabilities are a curse on the family |
| Need to focus on spirituality and meditation to help reduce social problems and encourage vision/growth |
| Religion in education is not always a true reflection of God |
| Hope that religion can be a thing of the past when dealing with politics as it is biased and conforms to set of ideals: separation of church and state |
| Cook Islands social approach to sexual health / sexual health education is complicated and often influenced by outdated religious doctrine |
| Need to return to a nation of Christian values |
| Laws should be based on the word of God |

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| Resourcing Signals (Total number = 6) |
| Need to equip and support parents |
| Need counselling for people moving back to the Pa Enua |
| Suggestion of ‘meals on wheels’ in the Pa Enua |
| Need more accessible services for youth experiencing unhealthy / violent relationships |
| Youth and LGBTQI need confidential and safe spaces for sexual health testing, advice and counselling |

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| Need support services / rehabilitation services for alcohol and substance abuse |
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| Further Information Signals (Total number = 4) |
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| Further study required to understand the overrepresentation of males in recidivism, prison, and violent offences |
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| Lack of information about those in the 0 – 3 year old category |
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| Flush toilets are problematic and waste water: what other options are there? |
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| Concerns over seabed mining: that inadequate data has been collected therefore there is a risk of causing irreversible damage to ocean marine life. |
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CONSULTATIONS AND MEDIA REVIEW

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by Rachel Michele Teana Reeves
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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM or TVKP. Errors or omissions that may have been unwittingly made are regretted.

Executive Summary

This report is the result of a review of audio recordings from consultations with various stakeholder groups focused on a number of issues identified by the National Sustainable Development Agenda 2020+ team, as well as a review of digital, print, and social media from the last 24 months. This research relied on the scanning methodology, which seeks to locate weak signals, or early signs of potentially important social, cultural, environmental, political or economic trends. A number of signals emerged, and this report attempts to analyse the connections between them and their relationship to the current historical moment, which has been shaped in part by the growth of the digital economy and the ongoing shutdown of tourism due to the COVID-19 pandemic.

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I. Introduction

Societies are always evolving. Anticipating their evolutions is key to governing them well. As the National Sustainable Development Plan 2016-2020 (Te Kaveinga Nui) nears its end, the Koutu Mana Tutara O Te Ipukarea - Office of the Prime Minister (OPM) Central Policy and Planning Office (CPPO) is seeking to understand which seeds of change planted in the Cook Islands are likely to bear fruit. This report intends to highlight some of the potentially transformative trends, ideas, and conversations occupying the public imagination in the Cook Islands, identified during a review of audio recordings from consultations with various stakeholders and of print, digital, and social media from the last 24 months.

This research employed a future-oriented method that attempts to detect early signs of potentially important social, cultural, environmental, political or economic developments through a systematic examination of potential threats and opportunities. Its intent is to locate weak signals, which can be indicators of disruptive trends and harbingers of societal evolutions. They can seem far-fetched; an example is the suggestion to legalise medical and recreational cannabis in the Cook Islands, which appeared multiple times during the review. This idea was once far-fetched in Australia and the United States, too, but now both governments are reaping the economic benefits of taxing cannabis.

The signals located during this review must be understood in the context of the historical, social, economic, environmental, technological, and political forces at work in the Cook Islands and beyond it. Signals related to economic diversification, for example, should be considered in relationship to COVID-19, which prompted the government to close the country's borders to tourists in March 2020. According to a survey conducted by the *Pacific Business Monitor Report*, the Cook Islands' economy was one of the most heavily impacted by the coronavirus pandemic.

II. Methodology

This research employed the scanning methodology, which seeks to identify weak signals. The researcher reviewed more than 20 hours of audio recordings taken during meetings between a team from the OPM and various stakeholders in Cook Islands society, ranging from heads of ministries to working artists. With each group, the team leading the consultation proposed the same set of questions, steering the conversation toward well-being, Māori immersion schools, sovereignty, digitisation, and changing the country's name. Also scanned were 58 sets of notes from meetings for which there were no audio recordings.

Additionally, the research involved a scan of print and digital media published in the last 24 months. Due to travel restrictions designed to reduce the spread of COVID-19, the review part of the process did not take place in the Cook Islands and so relied on databases available digitally. Many signals came from the national news and letters to the editor pages of *Cook Islands News*, which updates its website daily. The research also included a scan of Pacific Media Network, a broadcasting network in New Zealand that archives articles pertaining to Pacific affairs published by organisations such as Radio New Zealand and Dateline Pacific. The key terms Cook Islands and Cook Islanders were used to locate articles relevant to this research.

Social media, including Twitter and Instagram, were scanned using the hashtag #CookIslands and the key term Cook Islands. Many signals recorded in the social media template came from posts and comments in a private Facebook group entitled Rarotonga - Community and Beyond, to which administrators only admit people who are residing in, or have recently resided in, the Cook Islands. Currently the group's membership exceeds 11,200.

Engagement on this forum is high; it is common in the Cook Islands to hear conversations about posts on “the community page”. About the same number of signals came from posts by women and men, in a range of occupations, from bureaucrat to student. Two came from Cook Islanders currently living in New Zealand.

The review further considered the results of a survey posted to the OPM website, which asked respondents to share their vision for the country’s future in fewer than 200 words. It is perhaps worth noting that the number of female respondents was more than twice that of male respondents. Several of the people who participated in the survey live in New Zealand, but most of them live in the Cook Islands, specifically on Mauke, Aitutaki, and Rarotonga. Their occupations range from environmental scientist to ticketing agent.

Several templates were used to capture and organise the information located in the scanning process. (See Appendix for templates.) Possible weak signals were entered into the templates and tagged with a theme or themes (social, economic, environmental, technological, or governance). Relevant comments were also recorded. When a weak signal appeared frequently, the researcher would include two or three versions of it to indicate emphasis but delete the others. Signals too closely related to the National Sustainable Development Plan 2016-2020 were eliminated, thus narrowing the scope of the research to new and emerging ideas.

III. Limitations

For reasons previously stated, this review was limited to digital media. The *Cook Islands Herald*, the only other newspaper in the Cook Islands, does not have digital records of its issues from the last 24 months and thus was not included as part of this research.

Another notable limitation of this research is the subjectivity of the researcher. Weak signals must seem odd and new and interesting, and categorising them as such was, within the context of this research, a subjective exercise. One method of managing this bias was eliminating signals too resonant of the goals and indicators laid out in the National Sustainable Development Plan 2016-2020. The margin for human error also warrants mention.

IV. Positionality

The researcher’s subjectivity is shaped, in part, by experience writing in and about the Cook Islands as a working journalist, author, and communications consultant for various stakeholders in Cook Islands society, including government ministries such as the Marae Moana Coordination Office and the National Superannuation Fund and non-profit organisations such as Te Ipukarea Society and Autism Cook Islands. This experience, in addition to years of reporting for *Cook Islands News*, gave the researcher a broad network and a nuanced understanding of political, economic, social, and environmental issues facing the Cook Islands. Other relevant experience includes authoring a book about a fatal cyclone in the northern islands, which built an understanding of the disparities between Rarotonga and the pa enua, and managing a storytelling project called Lokal Magazine that highlights traditional knowledge as a pathway to healthy, sustainable living. It is also worth noting that the researcher has Cook Islands heritage and grew up in Los Angeles.

V. Findings

The research yielded 178 weak signals. Seventy-seven came from the audio recordings of conversations with stakeholders. Fifty-six came from print and digital media. Eighteen came from social media and 27 came from responses to the online survey.

The theme with the highest number of signals is technology, followed closely by sustainability. The next most common signals are related to education and immigration. Following are the signals connected to the Pride movement, the debate over deep-sea mining, and the economic potential of the arts. Other frequently appearing signals pertain to the role of culture in society, the Cook Islands' political and economic sovereignty, and Māori immersion schools.

Some signals are closely related to goals and strategies outlined in the National Sustainable Development Plan 2016-2020, but suggest new ways of understanding them. For example, the plan identifies increased agricultural production as a target goal but does not mention soil health. Some signals identified during this review suggest a return to more sustainable methods of agriculture, which prioritise and conflate the health of soil and humans. As another example, the plan suggests rates of reported incidents of domestic violence can be indicators of justice. A newly identified signal goes further, suggesting social determinants of health, such as abuse and parenting, should be reflected in strategies for improving public health.

Still other weak signals are outliers, such as suggestions that the government begin the process of purchasing land elsewhere, given the inevitable impacts of climate change on islands, or provide free and unlimited internet as a means of encouraging economic growth.

VI. Discussion

Technology

Technology, the category with the highest number of signals, is a topical subject of discussion in the Cook Islands, given two recent and related events: the amendment of a law that removed the monopoly on telecommunications and the installation of the Manatua cable. The National Sustainable Development Plan 2016-2020 identifies broadband penetration as a goal, but does not consider specific ways in which increased access to the internet broadens the scope of opportunities available in-country. Many signals identified during this review are associated with the potential of the internet to transform education, health, governance, and the economy. One even suggests that “virtual reality is the future”. This research located signals related to the economic possibilities in blockchain technology, crypto-currencies, and selling data storage; all of these were once weak signals in other countries, too, before they became trends. One signal, a headline about a teenager of Cook Islands descent living in New Zealand whose song on TikTok garnered millions of views worldwide, is a testament to the borderless reach of the digital economy.

Sustainability

The scanning process also yielded many signals related to sustainability. Some signals reflect a fear over the environmental implications of being one of the first countries in the world to mine the seafloor. Others suggest capping the number of tourists allowed in the country at any given time. Some envision an “import-free” country. The signals show a growing concern about the environmental impacts of development and an increasing interest in sustainable alternatives,

particularly among younger generations. The potential for innovation at this juncture is high. One signal offers interesting insight into what can occur at the intersection of technology and sustainability. Headlines show that in 2019, a team of young people from the Cook Islands entered an international robotics competition with a robot named Kuki, who could collect and store pollutants from the marine environment.

Indigeneity

Closely related to sustainability is the concept of reclaiming culture in a postcolonial society. A return to indigenous epistemologies is emerging in the Cook Islands and around the world. Conversations about sovereignty, changing the country's name, bilingualism, and establishing Māori immersion schools are percolating. These carry implications for policy making, governance, agriculture, education, the environment, the economy, and virtually all other areas of modern life.

Some signals portend a shift “back to basics”, or a return to planting and fishing. Some suggest modelling policies on the social mores of the outer islands. Some express a desire to integrate traditional knowledge into curricula in schools. One signal reflects a desire for leadership positions to be restricted to Cook Islands Māori.

Social and cultural empowerment are indicators of a society's well-being. Innovative programmes, policies, and publications are emerging in support of the ongoing decolonisation project underway in the Cook Islands. It is also worth noting that some signals reflect a fear of immigrants and of Cook Islands Māori becoming a minority in the Cook Islands. While this kind of thinking can be a catalyst for thoughtful policy, throughout history and across the world it has also fuelled xenophobia, violence, and a lack of respect for human rights. The scan of social media identified concerns along these lines.

Diversity

Many signals seem to contradict others, reflecting a diverse society moulded by migration and competing cultural influences. For example, some people talk about returning the nation to Christian values; others are advocating for separation of church and state. Another example is the tension between signals advocating for deep-sea mining as a pursuit that will lift all boats and signals expressing deep concern over the unprecedented activity.

There are many sensitivities around navigating diversity and maintaining justice for all. It is perhaps worth mentioning that studies show diversity of beliefs, opinions, and influences can have a net positive effect on productivity and economic growth (Ottaviano & Peri 2006). While diversity of experience, expertise, race, ethnicity, gender, and sexual orientation can cause discomfort, conflict, and concern within social groups, it has also been proven to enhance creativity, decision-making, problem-solving, and critical thinking within a group. As Katherine Philips writes in an essay entitled “Why Diversity Makes Us Smarter,” published in 2014 by *Scientific American*: “The pain associated with diversity can be thought of as the pain of exercise. You have to push yourself to grow your muscles. The pain, as the old saw goes, produces the gain. In just the same way, we need diversity—in teams, organizations, and society as a whole—if we are to change, grow, and innovate”.

Creative Industries

Some signals reflect the potential of new technologies to support the establishment of a multimillion-dollar creative industry. Data show that the creative economy is one of the most

rapidly growing sectors in the world, in recent years growing developing economies by more than 12 per cent per annum, and that it has been transformative in the process of generating jobs, income, and exports (Palanivel 2019).

It is worth noting that a robust creative industry can produce economic benefits, but also have a broader impact on the well-being of a society. Research shows that children who are involved with the arts in school achieve greater results in their education. The arts can also help children to form healthy emotional habits that set the tone for their lives.

Creative expression has been proven, clinically and anecdotally, to heal psychological wounds, reduce stress, increase self-awareness, and encourage healthy development. A connection can thus be made between creative expression and signals advocating for a violence-free, prison-free society, as well as signals highlighting a need for rehabilitative services for offenders.

COVID-19

Each signal must be understood in context. For example, concern over the lack of support for mental health in the Cook Islands is amplified by the global pandemic, a defining characteristic of this current moment. A survey conducted by the Pacific Trade Invest Network shows 93 per cent of Cook Islands business have reported a decline in revenue (PTI 2020). The pandemic can also be linked to signals associated with economic diversification, as well as a lens for understanding the signals pertaining to teaching children in schools how to plant and fish.

VII. Conclusion

Two of the most significant events to occur this year are COVID-19 and the installation of a fibre-optic cable. The first event resulted in the effective cessation of tourism, which continues to this day, and accelerated a public dialogue about economic diversification. It has also generated some other impacts, including a widespread return to the subsistence economy and more careful consideration of the environmental impacts of tourism. This coincides with a reclamation of indigeneity, traditional knowledge, and cultural values occurring throughout Polynesia, perhaps best represented by sovereignty movements in Aotearoa New Zealand and Hawaii. The second event, coupled with a new law that removes the monopoly on telecommunications, seems to have heightened conversations about opportunities in the digital economy.

Against this backdrop, various new ideas are emerging or gaining momentum. As the end of the Cook Islands National Sustainable Development Plan 2016-2020 draws near, the Cook Islands confronts exciting opportunities and concerning threats. Opportunities include the broader themes previously discussed, in areas such as technology, sustainability, and the arts. Risks include mental health, methamphetamines, climate change, cyber warfare, the commercialisation of land, infighting among traditional leadership, disaster in the marine environment, and accelerated outmigration due to COVID-19.

Perhaps the most interesting outcomes of this scanning exercise occurred at the intersection of themes. An example is Kuki, the robot manufactured by young Cook Islands students with the capacity to clean up pollutants. Another is the parallel one survey respondent drew between coding and the traditional art form known as *tivaevae taorei*, which are both based on finding patterns. The corollary is that technology and culture are not mutually exclusive.

Some limitations of this research were related to the researcher's subjectivity and the margin for human error or oversight. While a more rigorous methodology may have yielded different results, scanning allowed a flexibility necessary for mapping connections and contextualising ideas. Further work in mapping connections between signals that emerged during this review could bolster planning efforts related to the National Sustainable Development Agenda 2020+.

VIII. Recommendations

- Outliers should be considered and not dismissed, given the historical evidence that proves they are often valuable indicators in the work of anticipating shifts; and
- Further work is required to understand the connections between signals identified in this review.

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X. Appendix

Weak Signals Recording Template - Consultations

| Weak Signal | Consultation(s) | Tag(s) | Comments / Implications |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Digital economy - blockchain, cryptocurrency, selling secure data storage | FSDA Vodafone | Social, Technological, Economic | “Blockchain tech is the future” Cable facilitates new economic opportunities |
| “We need to be prepared for when NZ and Aus PMs say okay, coconuts, go home. We need to be prepared for that. Is there enough land? Are we ready?” | Internal Affairs | Social, Economic, Environmental | Connected to signals re: sovereignty movement? |
| Cultural “antennae” are up | Internal Affairs | Social | “Now that we can see, oh, our culture’s going down ... We’ve got our antennas up” |
| Cultural and societal expectations will lead to burnout | Internal Affairs | Social | “I find a lot of people here are working themselves to the bone for church for work for sports and then you die and what is it for?” “A common theme amongst a lot of our people is [having to make] everyone proud” |
| Lack of focus on social determinants of health is influencing our health | Internal Affairs | Social | i.e. abuse, parenting |

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|-------------------------------------------------------------------------|------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Spirit of self-sufficiency in the outer islands | Internal Affairs | Social, Economic | Re: govt assistance: “In Mangaia they didn’t want assistance; they wanted to show they can do it on their own.” |
| Virtual reality is the future | MFEM | Social, Technological, Economic | Applications for education |
| “Our students are coming out of primary school and can’t read or write” | MFEM | Social, Economic, Governance | Applications for education |
| People will value education if they have to pay for it | MFEM | Social, Economic | |
| Need policy change that builds a bilingual nation | MFEM | Social, Governance Education | “Why can’t we be bilingual? Why can’t we be as smart as the people in Belgium who are trilingual?” |
| “We’ve got a future filled with people who are not Cook Islanders” | MFEM | Social, Economic, Governance | “What work are they doing? They’re doing work that our people don’t want to do” Implications for policy, social stigma |
| We’re calling it organic but who knows what’s in the soil? | MOA | Social, Environmental | |
| Goal is to be import-free and pest-free | MOA | Economic, Environmental | |
| Agritech can help us work less | MOA | Technological, Environmental, Economic | “I don’t want my child out in the field working hard” |

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|--------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Focus on developing agriculture in pa enua and establishing a single processing location on Rarotonga (Blue Pacific building?) | MOA | Environmental, Economic | “In Rarotonga the land is running out” |
| No conversations about mental health during global pandemic | Creative Industry | Social, Economic | Long-term impacts of anxiety and depression triggered by financial stress |
| Cook Islands creative industry has “excellent potential to be a multimillion dollar industry” | Creative Industry | Social, Technological, Economic | Gaming industry has high potential. One game can employ up to 200 people on a contract basis |
| “Education is stuck in some era that’s not contributing to our future” | Creative Industry | Social | “We need to teach our children to dream big” |
| “In the next 100 years I think the Cook Islands can be in a position to help the Pacific position in a strong way” | MMR | Environmental, Economic, Governance | Re: conversations about climate change, resource management etc, “Cook Islands role in making meaningful change is negligible unless you are working with other partners who have similar interests” - Pam Maru |
| “You’ve got people in policy places who don’t understand it” | MMR | Governance | |
| Money is not an abundant resource; we can’t share it the same way we would primary resources | MMR | Social, Economic | Implications for social equality and collectivity |

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| Importance of spiritual values in criminal justice | Corrective Services | Social, Governance | “When the Super[intendent] is not there, God is watching” |
| “Culture is a barrier” | Corrective Services | Social | Parents don’t like their kids being taught to ask questions Implications for innovation |
| Long-term goal: zero crime, nobody in prison | Corrective Services | Social | |
| Headhunters from overseas are here looking for gang members | Corrective Services | Social | |
| Demographics of thieving changing | Correction Services | Social | More females stealing to feed their families |
| “Some of these [migrants] are not respecting the laws of this country” | Correction Services | Social | |
| Suggestion of a Maori TV channel with health/education programmes to play in schools | MOCD Ministry of Transport | Social | Goal: for every Cook Islander to be speaking the language in 100 years |
| Integrate traditional knowledge into the education system | MOCD | Social, Environmental, Economic | Localised curricula |
| Digital festivals an economic opportunity | MOCD | Economic | Pay per view videos of Te Maeva Nui, other events |
| Queen shouldn’t be our Head of State | MOCD | Governance | Implications for the sovereignty movement? |

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|---------------------------------------------------------------------------------|------|---------------------------------------------|------------------------------------------------------------------------------------------------------------|
| E-commerce in outer islands | MOCD | Social, Economic | A means of preserving traditional craft Need marketing and promotion support |
| Covid has increased the number of students/teachers needing support for anxiety | MOE | Social | There is a need to incorporate wellbeing across curricula |
| Reactivation of punas the silver lining of Covid | MOE | Social | Suggestion to develop them into clinics for home-based learning for parents about parenting, relationships |
| Pilot one full Maori immersion school | MOE | Social | Use it as a model going forward |
| “In 100 years we will be underwater” | MOE | Social, Environmental, Economic, Governance | Need to be ready to move to NZ |
| Video technologies will “bring our diaspora home” | MOE | Social, Technological, Economic | Use tech to facilitate linkages, exchange knowledge, and build a broad vision |
| Cook Islands could be a wellbeing destination | MOE | Social, Economic | Incorporate traditional knowledge and traditional medicine into marketable model |
| Health tourism | MOE | Economic | Offer surgeries |
| Develop apps to enhance local curricula | NES | Social, Technological, Environmental | Need for more Cook Islands-specific educational materials pertaining to the environment |

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|--------------------------------------------------------|-----------------------------|---------------------------------------------|----------------------------------------------------------------------|
| “Greening govt” | NES | Environmental, Economic | Charging stations for EVs |
| Probable increase in white-collar crime | FSC | Social, Economic | |
| Data and info banks an economic opportunity | FSC | Technological, Economic | |
| Digital nomad populations a target tourism market | Tourism | Technological, Economic | |
| A skatepark will reduce crime | Tourism CINYC | Social | Boredom a growing problem among youth |
| Time to change kaiou culture | Tourism | Social, Economic | Eliminate debt, teach money management |
| Buy land in other countries as a plan for future | Tourism Dr. Jon Jonassen | Social, Environmental, Economic, Governance | Climate change is real and happening |
| Stigmatisation of people with disabilities | Mataiti Mataiti | Social | “Our churches promote the idea that we are a curse on the family” |
| Justice system should reflect culture | Crown Law | Social | Maori language should be spoken in courts |
| Cook Islands has the potential to be a visual arts hub | Contemporary Arts | Social, Economic | Possibility of establishing a funding agency similar to Creative NZ? |
| “Our people are a dying race” | Dr. Jon Jonassen | Social, Governance | Implications for language revitalisation? |
| Set up an innovation hub/incubator | FSDA - Marie Francis OPM | Social, Economic | Offer grants for business and entrepreneurship |

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|-------------------------------------------------------------------|----------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Finance technology to create economic opportunities | FSDA - Marie Francis | Technological, Economic | Examples of fintech - digital wallets, investing apps |
| Education system needs practical application (no exams mentality) | ICI | Social | |
| Need a Maori immersion school grounded in science | Korero O Te Orau | Social, Environmental | High value in teaching kids the skills to grow/catch food Improves economic resilience |
| Cook Islands Maori people should occupy “all senior levels” | Korero O Te Orau | Social, Governance | “Value our people and knowledge” |
| “Back to basics” | Koutu Nui | Social, Environmental | “Akako’u te au taunga – save our knowledge base” |
| Digital economic opportunities - digital tax, digital workforce | Vodafone | Social, Technological, Economic | Revenue from the sale of digital products, innovation and economic growth |
| “ICT technology enables every goal” | USP | Social, Technological, Economic, Governance | Examples: agritech, e-learning, lifelong learning, office automation, telemedicine. E-health, e-commerce, tech-driven tourism, renewable energy, cybersecurity, greater social inclusivity, sustainability, economic growth (animation, artwork, raw data, software/code, apps, |

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|-------------------------------------------------|--------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <p>music, videos, advice/consultancy services, legal and accounting services, etc), etc</p> <p>Issues to consider: e-waste, ethics and education, digital divide between Rarotonga and pa enua, education of an IT-ready workforce, education on impacts of technology on well-being, etc</p> |
| Cyber warfare | USP | Technological, Economic | “It’s already here” |
| Amphibian aircrafts travelling to pa enua? | Ministry of Transport | Technological, Economic | |
| Need for a cremation centre | Tourism Industry Council | Social, Technological, Environmental | Running out of land |
| Value in providing free internet | Tourism Industry Council | Social, Technological, Environmental, Economic, Governance | Means of facilitating development |
| Flush toilets are problematic and wasting water | Penrhyn | Environmental | What are other options? |
| Goals: zero invasive species, zero waste | TIS | Environmental, Governance | Current NSDP makes mention, but not of “zero” goal |
| Need to focus on spirituality and meditation | Teina Mackenzie | Social | Reduce social problems and encourage vision/growth |

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|----------------------------------------------------------------------------|------------------------|------------------------------|---------------------------------------------------------|
| First home buyers scheme? | NGOs | Economic, Governance | |
| Seabed minerals will “eliminate poverty” | SBMA | Social, Economic | Will create a “thriving society” |
| “Need to instill our values in our migrant population” | Ministry of Transport | Social | Xenophobia? |
| Cook Islands could have its own Navy in 25 years | Police | Governance | Connections to sovereignty conversation |
| Zoom centres to improve nationwide governance | Parliamentary Services | Technological, Governance | Connectivity in pa enua a prerequisite |
| Maori first, English second | OPSC | Social, Governance | Implications for education |
| Cook Islands could have its own supreme court | MOJ | Social, Governance | Cook Islands judges trained within 25 years |
| “Religion in education not always a true reflection of God” | MOE | Social | Tension between institutional religion and spirituality |
| 4-day working week? | MOE | Social, Economic, Governance | Accommodates other family and community obligations |
| Laws, regulations, land decisions driven on island and not outside Mitiaro | Mitiaro | Governance | Response to colonial history |
| Education system to build ‘ivi pu’i - a person that can fish and plant | Mitiaro | Social, Environmental | |

Weak Signals Recording Template - Print / Digital Media

| Weak Signal | Source | Tag(s) | Comments | Implications |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|--------------------------------------|
| “Ministry of Agriculture is urging local growers to maintain the health of their soils amidst fears Covid-19 pandemic could spark a food crisis in the Pacific” | CINews, 23 Nov 2020 | Social, Environmental, Economic | | |
| Pope’s support for same-sex unions boosts Cook Islands campaign | Dateline Pacific, 5 Nov 2020 | Social, Governance | | Equality |
| PM says seabed mining is “not a gamble” but also that it is “an educated gamble” | Dateline Pacific, 3 Nov 2020 | Economic, Environmental | We are not “sheep” following other countries around | Economic gain? Environmental damage? |
| Call for Speaker of the House to resign when she ignores a petition protesting chlorine in the water | Dateline Pacific, 9 Oct 2020 | Social, Environmental, Governance | Petition with 1433 signatures submitted | |
| More Cook Islanders accessing health services as a result of Covid-19 | Pacific Media Network, 26 Aug 2020 | Social, Technological | Community groups established in response Digital/social media broadened access | |

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|--------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Pacific fashion designer says Covid-19 is improving his business | Pacific Media Network, 25 Aug 2020 | Technological, Economic | Richard Tekeu | Resilience of e-commerce |
| Covid-19 exacerbating threat of cyclones and climate change; there will be no reserves left | Pacific Media Network, 20 Aug 2020 | Environmental, Economic | “We remain highly vulnerable” - Steve Lyon | |
| Calls to teach Pukapukan language in NZ schools | Pacific Media Network, 6 Aug 2020 | Social | | |
| “The last couple of decades have seen intermarriages with foreign workers which is one concern being raised” | Pacific Media Network, 26 June 2020 | Social | Fears over changing demographics | |
| “Fear among Cook Islanders increasing over new immigration laws” | Pacific Media Network, 22 June 2020 | Social, Governance | <p>“The proposed changes are sparking concern that indigenous Cook Islanders will be outnumbered.”</p> <p>“It’s caused some stress for some families which have been through this and it will have more and more in the future because we’ve had large growing migrant</p> | |

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| | | | populations for our workforce over the past 10 years. And they have a lot of young kids and they're going to grow up knowing the Cook Islands, but not having any right to remain there." | |
| Protest over helmet law | Pacific Media Network, 5 June 2020 | Social | Concerns about lack of public consultation | |
| "The Cook Islands' deputy prime minister says losing its developed country status needs to happen quickly" | Pacific Media Network, 14 May 2020 | Economic, Governance | Fear over loss of development assistance | |
| Covid-19 WhatsApp channel developed in Cook Islands Maori in NZ | Pacific Media Network, 3 April 2020 | Social, Technological | Channel provided latest information on Covid-19 in Pacific languages | Possible implications for telemedicine and e-health |
| Pride Day counters ban on homosexuality | Pacific Media Network, 11 March 2020 | Social | | |
| New Cook Islands political party | Pacific Media Network, 14 October 2019 | Governance | Progressive Party "doesn't do political appointments and favours, but discusses issues and listens to its people"; addresses | |

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| | | | concerns about “growing Chinese influence, poor public service, and an ‘arrogant government’” | |
| Call for NZ to turn to Pacific for more seasonal workers | RNZ, 17 September 2020 | | | Post-Covid outmigration? |
| Cooks company to bring uncapped data to outer islands | Dateline Pacific, 7 September 2020 | Technological, Economic | Disruption of monopoly | Implications for e-commerce, health, education in pa enua |
| Cook Islands could see mass redundancies in the wake of Covid | Morning Report, 11 August 2020 | Social, Economic | Resort owner says Covid-19 will “decimate” tourism over the long term | |
| Cook Islanders could flee to NZ if borders remain closed | First Up, 11 August 2020 | Social, Economic | | Long-term economic consequences of Covid-19? |
| “Pacific Island states are looking at risky money making opportunities as they desperately seek ways to revive their economies hit hard by Covid-19” | The Detail, 31 July 2020 | Social, Economic, Environmental | <p>“We are in very serious, dire straits” - Florence Syme-Buchanan</p> <p>Example: deep-sea mining</p> | |
| Crucial identity and immigration reckoning for Cook Islands | Dateline Pacific, 22 June 2020 | Social, Governance | Indigenous Cook Islanders fear new laws will increase the number of | |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| | | | migrants allowed in the country | |
| Cook Islanders should not pay any more for Rarotongan water system | Dateline Pacific, 9 March 2020 | Governance | | Tension? |
| "If you worry too much about things you can't control, what's the point? Because you're not going to make them change their minds" - former PM Henry Puna on climate change | Dateline Pacific, 2 November 2018 | Environmental, Governance | | Meaningful contribution to global conversation only possible in partnership |
| No legal watchdog in the Cook Islands | John Scott, Letter to the Editor, CINews, 22 December 2018 | Governance | "As I have said before, where are these people when the ship of state is heading for the reef?" | |
| Environmental disaster possible | June Hosking, Letter to the Editor, CINews, 4 February 2019 | Environmental | "What happens if there is a leak? How long will it take to discover a plume of sediment that could be devastating to ocean life higher up the column?" | |
| Meth issue "bigger than you and me" | Letter to the Editor, CINews, 21 May 2019 | Social, Economic | Without addressing meth meaningfully, will need resources for rehabilitation, | Harder drugs could overburden the prison system |

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|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| | | | court, crimes, associated stresses in future | |
| Skatepark, climbing walls, basketball hoops, hip hop lessons, parkour teams etc will cut down on crime | Ruth Mave, Letter to the Editor, CINews, 15 July 2019 | Social | Teenagers more likely to drink and steal when they're bored | |
| Psychiatrist Dr Colin Patrick: Dementia to become an increasingly prevalent problem | Letter to the Editor, CINews, 3 August 2019 | Social | Elderly will comprise 20-25% of the population by 2040 People with dementia often benefit from daycare in some form, which allows them to socialise and gives carers a break Need for dementia education | |
| "Chlorinated water affects our agriculture, mark my word, and our human life" | Joe Ngatae, Letter to the Editor, CINews, 21 August 2019 | Social, Environmental | "Chlorine is a river of no return" | |
| "Cook Islands is prime real estate for non-Cook Islanders" | Letter to the Editor, CINews, 28 August 2019 | Social, Economic | | Economic pressure to change land tenure system? |
| "The ants know everything!" | Ani O'Neill, Letter to the Editor, CINews, 31 October 2019 | Governance | "Government needs to listen to their people and stop acting like | Lack of public trust in governance |

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|----------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| | | | we are annoying ants who know nothing” | |
| Publicity of criminalisation of same-sex relationships will deter tourists | Letter to the Editor, CINews, 4 November 2019 | Social, Economic | Tourists will vote with their dollars | |
| Traditional medicine “not so primitive” | Tuakeo Pilato, Letter to the Editor, CINews, 20 November 2019 | Social, Environmental | | |
| Sex education a counterweight to the negative impacts of pornography | Debi Futter-Puati, Letter to the Editor, CINews, 9 January 2020 | Social | Pornography “changes attitudes and values very quickly, and normalises a variety of things. To name just a few: non-consensual sex / that 'no' means 'yes', that no condoms / contraception is required, and that anal sex is common...” | Faster, more affordable internet broadens access to pornography |
| Cyclone would wipe out new waterfront | Papa Williams, Letter to the Editor, CINews, 8 February 2020 | Environmental, Economic | Government’s big project indicates lack of awareness of impacts of climate change | |
| Pressure from seabed mining companies likely | John Scott, Letter to the Editor, CINews, 10 June 2020 | Social, Environmental, Economic | Corporations won’t spent money on exploration without | Long-term impacts for industry and environment |

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|--------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| | | | guarantee of return | |
| House of Ariki 'offended' | Tupuna Rakanui, Letter to the Editor, CInews, 18 September 2020 | Economic, Governance | Avaroa Cable seeking a ra'ui offends traditional leaders | |
| Koutu Nui 'not subordinate to Ui Ariki' | CInews, 6 October 2020 | Governance | Minister George Angene says Koutu Nui should be brought under the authority of the House of Ariki; Koutu Nui says it's a separate body | Infighting amongst traditional leadership? |
| Residents alerted over online 'scam' | CInews, 16 October 2020 | Technological, Economic | Enhanced need for cybersecurity | Need for awareness and education |
| Fisheries industry untapped | CInews, 1 August 2020 | Environmental, Economic | "Cook Islands' fisheries haven't had the opportunity to realise their full multimillion dollar potential. Until now." | Potential for protests against fisheries management reminiscent of 2014, 2015? |
| Why do foreign mining companies advise on our seabeds law? | Kelvin Passfield, Letter to the Editor, CInews, 27 June 2020 | Social, Environmental | | Potential for conflict |
| "Tourism will never be the same again" - Ivirua MP Agnes Armstrong | CInews, 30 June 2020 | Social, Economic | | What does a post-Covid economy look like? |

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|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Concerns over seabed mining | Jacqui Evans, Letter to the Editor, CINews, 30 May 2020 | Environmental | “Without adequate time to gather data, there is a risk of causing irreversible damage to marine life in our ocean.” | |
| “Cooks teen TikTokking to the top” | CINews, 13 May 2020 | Social, Technological, Economic | Cook Islander’s song was used in 32 million online videos, streamed on Spotify 5 million times, and became one of the most popular TikTok songs of 2020 | Greater connectivity enables broad, borderless reach Economic potential? |
| Sewage outfall in ocean will cause problems | Justine Flanagan, Letter to the Editor, CINews, 24 March 2020 | Environmental | “This is manipulative and disingenuous” | Frustration over lack of genuine consultation with the public |
| Theatre brings “a new form of expression” to the Cook Islands | CINews, 15 February 2020 | Social | “Tehere says that her play was a chance for her to ... show young aspiring artists that they can build careers in the arts – something she never saw when she was growing up here.” | |
| Covid a chance to plan for pa enua tourism | CINews, 23 January 2020 | Economic | “The [Tourism Industry] Council considers the gentler growth to | |

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| | | | be a blessing in disguise.” | |
| Overseas landowners don’t recognise leaders | Lynnsay Rongokea, Letter to the Editor, CInews, 23 November 2019 | Social, Governance | Their “decisions and actions create disharmony within families and the community” | Implications for land tenure? |
| Same-sex law has economic implications | CInews, 14 December 2019 | Social, Economic | The “impact on the tourist industry of a pink dollar boycott has also alarmed many” | |
| Cook Islands youth compete in robotics Olympics | CInews, 16 October 2019 | Technological, Environmental, Economic | “With its theme ‘Ocean Opportunities’ and 191 countries attending, the challenge focuses on developing robots to clean up the millions of tons of pollutants in the oceans. ... Kuki can drive, collect pollutants, store pollutants and dock on the processing barge...” | Technology-based solutions to environmental problems |
| Film and writing festivals can put the Cook Islands in the spotlight | CInews, 31 August 2019 | Social, Economic | “[Award-winning playwright] Miria George sees Rarotonga as a hub of | |

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|-------------------------------------------|--------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| | | | contemporary Pacific arts.” | |
| Pukapuka film “speaks to the world” | CINews, 10 August 2019 | Social, Environmental | Film highlights the “innate understanding of food security and conservation wisdom” of island people | Implications for education? |
| Addiction a growing problem | CINews, 12 July 2019 | Social, Economic | “Are we ready? No. But we need to be investing in addiction services” - Dr Evangelene Daniela-Wong | |
| Flooding “a big worry” | CINews, 9 May 2019 | Environmental, Economic | Parts of Avatiu, Muri and Titikaveka are flood-prone areas | Impact on cost of infrastructure and maintenance |
| Fear over seabed minerals law | CINews, 10 February 2019 | Social, Environmental | “The perception that too much authority may be vested in the minister responsible is among wide-ranging public concerns raised over the controversial draft seabed minerals law.” | Potential for legal action? |
| Palmerston celebrates university graduate | CINews, 3 December 2018 | Social, Technological | “This is a first for Palmerston where a USP student has attained a certificate with all her studies | Implications of broader access to internet for education |

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| | | | completed on island.” | |
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Weak Signals Template - Social Media

| Weak Signal | Source | Tag(s) | Hashtag(s) & Keyword(s) | Comment(s) |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------|-------------------------------------------|------------|
| Cook Islands “opens seabed for #minerals exploration. They admit it could be damaging for environment” | Twitter - @DennySabah 18 Nov 2020 | Environment, Economic | #CookIslands #minerals | |
| Bill expanding criminalization of #LGBT sex may violate constitution | Twitter - @LGBTMarriage 15 Nov 2020 | Social, Governance | #LGBT #CookIslands | |
| This island sacrificed its economy to stay coronavirus-free | Twitter - @BW 27 May 2020 | Economic, Governance | #CookIslands | |
| Continued criminalisation of “gay sex ... very disappointing” | Twitter - @paulkidd 4 Nov 2019 | Social | #CookIslands | |
| Business leader in the Cook Islands says rights are being “unreasonably” restricted due to Covid | Twitter - @NewshubNZ | Social, Economic, Governance | #cookislands #covid | |
| Cook Islands to allow seabed mining licenses “despite negative | Twitter - @savingoceans 10 July 2020 | Economic, Environment | #CookIslands #Seabed #Environmental | |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|-------------|--|
| environmental impact” | | | | |
| Overseas Cook Islanders “contribute their taxes to looking after ANOTHER country. BUT still expect to come home & enjoy & expect the same rights as those living here looking after everything (eg land) & paying taxes that go towards cheaper healthcare (that those living overseas come home for a holiday & take advantage of, get their teeth fixed 'cos OMG you pay an arm & a leg overseas!!)” | Facebook - Rarotonga Community and Beyond page - Jackie Tuara 19 June 2020 | Social | Immigration | |
| Concern about the “divisive nature of commentary” around immigration and what defines a Cook Islander - “us and them mentality” | Facebook - Rarotonga Community and Beyond page - Maire Browne 19 June 2020 | Social, Governance | | |
| Absentee landowners selling land to the highest | Facebook - Rarotonga Community and Beyond page - | Social, Governance | | |

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|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------|------------------------------------------------------------------------------------|
| bidder - happening more than ever before | Tere Carr 19 June 2020 | | | |
| Reviving CI Robotics Club to teach young people coding, app building, web development | Facebook - Rarotonga Community and Beyond page - Mii Nimerota 2 July 2020 | Social, Economic | #robotics | |
| Economic potential of growing marijuana | Facebook - Rarotonga Community and Beyond page 29 April 2020 | Economic, Governance | Diversify | |
| Become an IT hub | Facebook - Rarotonga Community and Beyond page - Paul Lynch 29 April 2020 | Social, Economic | Diversify | |
| Dropshipping and print on demand - potential of e- commerce | Facebook - Rarotonga Community and Beyond page - Tamati Iro 29 April 2020 | Economic | Diversify | |
| Potential to become “leaders in CBD production” | Facebook - Rarotonga Community and Beyond page - Cain Rakanui 29 April 2020 | Economic | Diversify | “Perfect climate” “Unfortunately we don’t like what we don’t know” |
| Fundamental human rights “under negotiation” | Facebook - Rarotonga Community and Beyond page | Social, Governance | #cookislandspride #PrideCookIslands | |

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|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|----------------------|-----------------------------------|
| | | | #SaveOurHuman Rights | |
| Limit the number of tourists allowed at a time | Facebook - Rarotonga Community and Beyond page - Tashi Tutai 17 Aug 2019 | Economic, Governance | | “People want what is hard to get” |
| Time to decolonise gender | Facebook - Rarotonga Community and Beyond page - Teherenui Koteka 2 Nov 2019 | | LGBTQ | |
| Law trying to supersede papa’anga - trying to define a Cook Islander legally is “to think in a completely non-Maori way” | Facebook - Rarotonga Community and Beyond page - Liam Kokaua 10 June 2019 | Social, Governance | #indigenous | |

Weak Signals Template - Website Survey

| Weak Signal | Source | Tag(s) | Comment(s) | Implication(s) |
|-------------------------------------------------------------------|--------------|-----------------------------|-------------------------------------------------------|----------------|
| Modern school more interactive and in line with job opportunities | Eileen Story | Social, Economic, Education | “Move away from the old way of sitting behind a desk” | |
| Need protection from “other countries looking to exploit us” | Eileen Story | Governance | | |
| Pursuit of self has shifted our | April Revake | Social, Governance | “A legacy I would like to | |

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| values - need to become a nation centred on Jesus Christ | | | pursue for our people is one that acknowledges God in every aspect, that nurtures the importance of family and taking care of what we've been blessed with (people, environment, resources) and focuses on loving and serving one another" | |
| Offer virtual tours of the Cook Islands | Georgina Hand | Economic | | |
| User pay systems for public services (ie increase vehicle registration cost, advanced disposal fees) | Jaime Short | Economic, Governance | Should apply to doctor, dentist, school Community services card for people who can't afford services | More responsibility for the provision of public services |
| Green engineering to mitigate negative impacts of development | Jaime Short | Economic, Environment | | Job creation |
| Be guided by the people of the pa enua who have learned "to live with their environment rather than try to | Ngamata Tuara | Social, Environment, Governance | | |

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| change it” | | | | |
| Turn the Cook Islands into Eden in 10 years | Susanna Wigmore | Environment, Governance | | |
| Cap on tourists | Neil Davison | Economic, Environment, Governance | Prevent strain on resources and promote as an exclusive, high value destination | |
| Don’t change what we have achieved and done | Joe Tererui | Social, Governance | | |
| Should be internationally known as a “garden community” and recognised for “nature walks” | Bevan Rakoia | Economic, Environment | | |
| Design an area for Cook Islanders to “break new grounds globally as thinkers and creators” | Susan Sadaraka | Social, Economic | E.g. architecture, coding, artists, textile designers “Design thinking enables us to solve complex problems using our born ingenuity” Tivaevae taorei technique identical to the principles of coding | |
| Discrimination occurring | Ovaia Henderson Liew | Social | | |
| Need a Maori name | Teokotai Paitai | Social, Governance | | |

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|----------------------------------------|------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Decolonise policies | Elsie Hosking | Social, Governance | | |
| Legalise cannabis | Elsie Hosking | Social, Economic, Governance | | |
| Cut land leases down to 15-30 years | Elsie Hosking | Economic, Governance | “So the land can stay in the hands of Cook Islanders” | |
| Separation of church and state | Elsie Hosking | Governance | “I hope religion can be a thing of the past when dealing with politics as it’s biased and conforms to a set of ideals” | |
| Mostly plant-based diets | Jacqueline Evans | Social, Environment | Self-sufficiency, sustainability, and excellent health | |
| Universities in the outer islands | Frank Sabatano | Social, Education | “People from around the world will recognize our individual strengths and cultural history” | |
| Medical university in the Cook Islands | Frank Sabatano | Social | “A health care system equal or above that of New Zealand’s” | |
| Teachers should have degrees | “Tama Riki” | Social, Education | “My vision would be for schools to be offering quality teaching for our future tamariki. This means having skilled and competent | Economic potential of education |

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| | | | teachers, teaching in our schools” | |
| 100% plastic free | June Hosea | Environment, Governance | | |
| Bilingual nation | June Hosea | Social, Governance | | |
| A name that reflects our unique nation | June Hosea | Social, Governance | | |
| When families don’t live or work on their land for a certain period per year, it should be available to other families | Helen Tepaki | Governance | “Our tupuna did not want a few families to control a majority of the land leaving others with no land to build upon and raise their family” | |
| Reduce debt | Don Asking | Economic, Governance | “I feel that as long as our government owes another country, be it in resources or finance every Cook Island individual and family are in danger if things cannot be paid in time” | |



Document Review Report

For the Cook Islands National Sustainable Development Agenda 2020+

Central Policy and Planning, Office of the Prime Minister

Report prepared for
Te Koutu Mana Tutara O Te Ipukarea
Office of the Prime Minister
Central Policy and Planning Office

Merita Tuari'i Wi-Kaitaia

December 2020

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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM or TVKP. Errors or omissions that may have been unwittingly made are regretted.

Executive Summary

The analysis found a key number of repeated themes that are not contained in the current iteration of the National Sustainable Development Plan (2016-2020). These include:

- Diplomacy

Two reports discuss the power asymmetry in bilateral relationships and their impact on countries with small economies. Power asymmetry can potentially be a threat to the Cook Islands benefitting from domestic resources of high international interest. One report discusses current and potential regional threats that can hinder the Cook Islands' regional aspirations.

- Regenerative Approach

Five reports mention a “maturing” of tourism to become a more sustainable sector, while regional and international reports suggest that regenerative tourism is the way of the future, especially after the COVID-19 pandemic. One report mentions a return in the Cook Islands to traditional agricultural knowledge for food security, also supported by international movements to make agriculture “regenerative”.

- Innovation

Two reports suggest the Cook Islands can become a hub of innovation with the installation of the Manatua Cable bringing high-speed internet to the country, with another two suggesting e-industry is the path for the future of the Cook Islands. A regional report discusses acceptance of blockchain technology in the Pacific, while international reports suggest inter-territorial drone freight will be a transport game changer.

- Identity

One report mentions the Cook Islands emerging from use of limited, Western conceptualisations of the country, such as Small Island State, to identities such as Large Ocean State or Oceanic Island State, and the subsequent opening up of development opportunities through a changing state identity. Another report discusses the way locals adapt to using Information and Communication Technologies (ICT) by taking an indigenous approach and rejecting Western uses or concepts about ICT. One further report discusses the historical adaptation of Cook Islands peoples to atoll living and the importance of capturing this traditional knowledge for future sustainable living, while another discusses the clash of narratives of sexuality as a core aspect of Cook Islands' social change.

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Introduction

“The greatest danger in times of turbulence is not the turbulence, it is to act with yesterday’s logic” - Peter F. Drucker

To have a vision of the Cook Islands for future generations requires thinking outside the box. With the Cook Islands’ current National Sustainable Development Plan 2016-2020 (NSDP 2016-2020) coming to an end, a wide-reaching and far-sighted framework to guide the Cook Islands in its development for the future is needed. The new iteration of the Plan, the National Sustainable Development Agenda 2020+ (NSDA 2020+), aims to be a generational roadmap of Cook Islands development and will have a research-based foundation from which the development trajectory of the Cook Islands can have its best start.

This analysis is one of four areas of analysis where horizon scanning is used to note where discussion of new issues and/or developments have taken place. It includes scanning of available completed research conducted in the Cook Islands over the past 36 months, and of government and development partner commissioned reports.

The layout of this report has been fashioned into two parts; Part I involves themes that feature prominently from reports and are not addressed in the NSDP 2016-2020; Part II addresses topics covered in the NSDP 2016-2020, with new ideas that are also not specifically mentioned in the Plan.

Scope

Much of the literature mentions the capacity and resourcing constraints of the Cook Islands government. This review is not an evaluation of current government practices, challenges or opportunities, but an insight into the larger picture; movements; discussions; and suggested systems and opportunities of Cook Islands society, that may direct or become pronounced in the near, mid and far futures.

Limitations

The analysis is limited by reports that are accessible. For a more holistic view of emerging issues that could affect the Cook Islands, a much wider variety of research and primary documents is needed. This not only includes research conducted in the Cook Islands but regional and international sources as well. Moreover, limited accessibility meant that analysis was also limited by researcher bias in discerning what reports contained the most relevant information. Information was included that had some indication of a possible or preferable future even though that information may not be strictly viewed as signals as defined by the horizon scanning method, i.e. “developments that are perceived to have unknown or low probability of occurring and a potentially high disruptive impact if they do occur” (Government of Canada, 2020).

Methodology

A futures-oriented approach was used to systematically analyse 57 research papers and government commissioned/endorsed works. This involved using horizon scanning to review documents for new ideas or topics, called “signals”, not targeted or contained in the NSDP 2016-2020. Where reports were not provided directly, a list of research titles provided by the Office of the Prime Minister was used to search for completed works online. A very small number of research documents were excluded for time, for example research on weevil and psyllid types that were taxonomic in nature. Key ideas were manually entered into a database that could be filtered by familiar topic areas (such as environment, society and economy), while signals not clearly linked to the key topic areas were entered into a separate database. Themes were then conceptualised based on signal clusters. These were added to as more evidence, or signals, pointed to a need to highlight them. As a significant number of single reports address various themes within them, it was more practical to separate these out from reports focusing on one topic.

The impact and significance of signals were measured based on evidence of relevance to the Cook Islands, and also if signals had already been assigned an impact score, such as in the Ministry of Foreign Affairs and Immigration (MFAI)’s 2050 Blue Pacific Continent Strategy Drivers of Change report, where consultation participants rated identified drivers (Ministry of Foreign Affairs and Immigration [MFAI], 2020).

Where more information and clarification were needed on a common theme, such as “maturing of tourism” (Birnie & Tierney et al., 2018) and traditional approaches to agriculture, a quick online search was conducted, and relevant news and journal articles were utilised for this analysis.

Positionality

This analysis is informed by the researcher’s previous work for the Office of the Prime Minister’s Central Policy and Planning Office, and familiarity with the NSDP 2016-2020. It is further informed by time the researcher spent studying in East Asia, at Ritsumeikan Asia Pacific University, where Asia Pacific issues, movements and politics were the core subject of the curriculum, along with networks made at the university.

PART I

1.0 Introduction

This part provides a collection of themes that emerged from consolidating clusters of signals from analysed reports. These are themes that were not contained within the current NSDP 2016-2020, however have the potential to become part of the NSDA 2020+ due to their unique insights.

1.1 Diplomacy

“... a developed Cook Islands is a sustainable, self-governing, contributing member of regional and global society. However, it remains true to the values and aspirations of Cook Islanders.” –
Research Participant, in Raymond (2017), page 88.

The importance of international relationships to the Cook Islands cannot be understated. The subject of development partnerships emerged from most reports analysed, however only two reports indicated the stark reality of these relationships and what they could mean for future endeavours in the Cook Islands.

1.1.1 Bilateral Asymmetry

Asymmetric power in Cook Islands’ relationships with larger countries is seen as a real threat to wealth not being distributed for development needs (Petterson & Tawake, 2018). Petterson & Tawake argue that this is a particular concern in the Cook Islands seabed mineral mining industry (p. 286). The study noted that rarely are people against seabed mineral mining itself, however concern is expressed at its potential to harm the environment and the country actually benefiting from the industry (Ibid.; MFAI, 2020, p. 18 & 22). This is exasperated when national governance is weak and negotiation capacity is small (Petterson & Tawake, p. 278).

Asymmetry in bilateral relations with larger countries can potentially be equalised with a triangular approach (Wi-Kaitaia, 2020). This means any national economic undertaking with international interests that also involves significant local public interest and costs could be considered for multilateral co-operation. As suggested in Wi-Kaitaia (2020), the Cook Islands has the potential to manage a trilateral engagement for achieving national interests.

1.1.2 Regional Security

Participants at the 2050 Blue Pacific Continent Drivers of Change consultations on Rarotonga indicated that regional and international security issues such as climate change, depleted resources, transnational crime and cybercrime are significant influencers on Cook Islands’ “national and regional aspirations” (MFAI, 2020, p. 36). Geostategic competition between China and the United States in the Pacific particularly impacts Pacific regionalism, which could increase as competition intensifies between the two powers.

1.2 Regenerative Approach

If there is anything that the COVID-19 pandemic brought through, it is the chance to take a “breather” – to take a step back and reconsider our approach to industries that matter to us the most, such as tourism and agriculture.

A popular keyword since the 1980’s has been sustainability. It is defined as the current generation’s gift for future generations; continue using the world’s resources, but not to the extent that we leave future generations disadvantaged (Brundtland, 1987). However, even this approach has faced criticism for merely maintaining an essentially extractive model (Glusac, 2020). There are signals that the regenerative model, with its **philosophy on replacing what we take**, will overtake sustainability. With New Zealand, the Cook Islands’ key market, set to focus on domestic and regional or trans-Tasman travel (Becken, 2020), the Cook Islands is forced to rethink its tourism model as a whole as well.

1.2.1 Tourism

A maturing of the Cook Islands tourism sector, including forms of sustainable tourism such as “slow tourism” (Tucker, 2018), and tourism targeted at high-end clients (Pettersen & Tawake, 2018) is a common theme from research reports (Birnie & Tierney et al., 2018; MFAI, 2020; Prinz, Story & Lyon et al. 2020; Sadaraka 2017).

Tucker (2018) found that elderly visitors who spend the most and visit from the furthest markets tend to be the most environmentally conscious (p. 2), with those that are already environmentally conscious will bring those practices with them. Despite most visitors indicating that they are engaging in environmental protection practices, local infrastructure and information around important measures, such as recycling and where to access clean water for refilling reusable bottles and containers, are missing. Tucker also reports that there are international movements and interest in using slow tourism; tourism that promotes sustainable tourism practices such as alternative modes of transport over air travel.

At the Drivers of Change consultations (MFAI, 2020), participants revealed a concern for the sustainability of the tourism industry following the COVID-19 pandemic (p. 24). Participants supported development of an eco-tourism model for the Cook Islands, with high-yield visitors over a high-volume of visitors.

Although far from being a new topic or idea, a sustainable tourism sector is not included in the NSDP 2016-2020. Regional and international reports suggest moving even beyond sustainable towards a “regenerative” approach to tourism (Becken, 2020; Glusac, 2020). This form of tourism takes components of circular economy and ecosystems philosophy to increase quality of experience over volume. This includes working in and with the environment, local society and culture to replace what was taken out, such as tree planting activities for tourists that used airplane travel to the destination (p. 30).

Becken (2020) writes that the sustainable approach is not enough and can do more harm than good. With regenerative tourism, there is an understanding that everything is connected and that tourism as a whole must be designed to give back to local culture and the environment.

Glusac (2020) mentions that some in the international tourism industry are making moves for a “greener, smarter and less crowded” tourism future using regenerative tourism.

1.2.2 Agriculture

The Drivers of Change Report (MFAI, 2020) suggests a change in our approach to agriculture, with the current model of supplying the tourism industry as unsustainable and impacting livelihoods, particularly after the COVID-19 pandemic (p. 23), while veganism, organics and alternative lifestyles have impacted the Cook Islands agriculture industry, demanding an ecosystems-approach (p. 28). According to the Cook Islands 6th National Report for the Convention on Biological Diversity, a return to traditional ways of pest management and planting is increasing throughout the Cook Islands (Cook Islands Government [CIG], 2020a). However, that it needs more development. Such regenerative agriculture practices are gaining momentum internationally, especially in response to climate change, where regenerative agriculture is recognised as a tool to sequester carbon (Rodale Institute, 2015). Regenerative agriculture could replace or amalgamate with sustainability for better food security (Payne, 2019; One Earth, 2020).

1.3 Innovation

Although the Cook Islands is not known for innovation (Avaroa Cable Limited [ACL], 2019, p.4), there is potential with the introduction of high-speed internet through the Manatua Cable (ACL, 2019; Office of the Public Service Commissioner [OPSC], 2019). Innovation increases economic value, especially for low population countries.

1.3.1 The Future is Online

A report by Avaroa Cable Limited finds that there is a gap in Cook Islanders being connected online and actually utilising the internet to do business (ACL, 2019, p. 7). Island profiles by the Ministry of Finance and Economic Management (MFEM) show that a significant number of people in each outer island already have internet access, however the islands support little or no private sector (Ministry of Finance and Economic Management [MFEM], 2019a; 2019b; 2019c; 2019d; 2019e; 2019f; 2019g; 2019h; 2019i; 2019j; 2019k). With the development of the Manatua Cable there is room to develop an online innovative and e-industry presence for all Cook Islanders (Petterson & Tawake, 2018, p. 273), showing that with Goal 5 of the NSDP 2016-2020 (Build Resilient Infrastructure and ICT and Improve our Standard of Living) achieved, the focus should now be connecting all islands to fibre optic infrastructure and using ICT for national opportunity, connection and wealth.

Participants at the Drivers of Change consultations indicated the future will be driven by a digital society – an ICT-centric Cook Islands (MFAI, 2020, p. 31). Participants identified that such a society would provide opportunities for innovation, virtual workplaces and education, however, will also come with increased security concerns such as cybercrime and online transnational crime (p. 14).

1.3.2 New Access, New Technologies

The Drivers of Change consultation participants also identified the difficulty of project investment due to high transaction costs in the banking sector (MFAI, 2020, p. 25). According to Paul (2019), with better online access, island nations are able to increase opportunities for secure, fast, and cheaper financing options. For example, the Marshall Islands has legislated for its own currency to be used alongside the U.S. dollar, however as a cryptocurrency. Paul writes that the costs of doing business in the Pacific are limited by traditional currency. With blockchain technology, remittances are expected to be easier; transactions more secure and accessible from even the most remote islands; and overheads cheaper due to the online currency only requiring maintenance of a network rather than banks with printing and processing costs. Internationally, more countries are also investing in blockchain technology. The Cook Islands development partner, China, is already setting the stage to become the leading blockchain baseline software developer (Fanusie, 2020).

In addition, recently developed inter-territorial drone transport is set to become a game changer for diversification in goods-transport. With large, unmanned aircraft completing flight tests around the world (Woods, 2018; Jordan, 2019), cross-ocean freight could become cheaper, faster and more fuel efficient. Stolaroff, Samaras & O'Neill et al. (2018) note that as demand for alternative energy options increase, drone freight could become the most cost-effective option due to the reduced fuel emissions of unmanned flight. Although established in regions other than the Pacific, island territories are already utilising the technology (British Broadcasting Corporation [BBC], 2020). Reliable and cost-effective inter-island transportation has been an ongoing issue for the Cook Islands (MFAI, 2020, p. 30), and while options such as government subsidised shipping has been moving forward, the Cook Islands could come across drone technologies in the future, particularly in disaster response efforts (Lacanale, 2018; United Nations Children's Fund [UNICEF], 2020).

1.4 Identity

“... [resist] the urge to be complacent in letting the taken-for-granted discourse navigate.” – C. M. Newport, 2019, p. 261

From values about the self to values about the nation, identity is an important aspect of navigating development. Identity can bring a person a sense of belonging in their community, and a community's place in the world (Miscevic, 2001). Identity can also be a force for co-operation between states, as in the Pacific regional incorporation of the “Pacific Way” – a recognition of Pacific peoples' common cultural values and sense of community (Song & Mosses, 2018).

1.4.1 Large Ocean State

Using the term Large Ocean State to describe island nations is gaining momentum (Pettersson & Tawake, 2018, p. 272). In Newport (2019), discarding limiting conceptualisations of the Cook Islands and other island nations, such as small island state, and utilising indigenous concepts such as oceanic island state (Ibid., p. 5) can open up policy space for development of the country. MFAI already recognises the importance of the Large Ocean State concept (MFAI, 2019), however identity branding and its link to development is not mentioned in the NSDP 2016-2020.

1.4.2 Indigeneity

1.4.2a Indigenous First

Reports by Newport (2019) and Stephany (2017) indicate that indigenous approaches, or indigenous/Western hybrid approaches to various issues are gaining preference. Indigeneity and a post-colonial mindset are recommended for policy formulation, with concepts such as “subverting” or “disrupting” Western thinking and perspectives being suggested (Newport, p. 251; Stephany, p. 150). Milne, Deuchar and Berno e. al (2017) found that accepting indigenous Pacific approaches to land ownership are increasingly recommended by those in the finance industry as an appropriate approach to investment in the Pacific.

1.4.2b Kite Pakari – Traditional Knowledge: The Cook Islands way

Recognition of indigenous approaches to land and resource management are gaining interest in the research realm, with approaches to societal arrangements and atoll living a major interest for sustainability in the face of a changing climate (Newport, 2019; Cramb 2020).

Cramb (2020) found through their study of Manihiki and Rakahanga historical resource management, that collective effort and ingenuity were major factors in atoll living, while a fluid society that is adaptable, travelling and interconnected is what defines Cook Islands society.

1.4.2c International Recognition of Indigeneity

The New Zealand Ministry of Foreign Affairs and Trade recognise the indigenous connection between New Zealand and the Cook Islands as an important factor for the “special relationship” between the two countries (Ministry of Foreign Affairs and Trade [MFAT], 2015). A memorandum of understanding between the Cook Islands government and the Kīngitanga Movement¹ in New Zealand was signed in 2015, signifying the importance of indigenous connection and co-operation beyond state-to-state relationships for the future of the Cook Islands (Newport, 2019, p. 235).

SOGIESC (Sexual Orientation, Gender Identities and Expressions and Sex Characteristics)

From tourism marketing to colonial-influenced heterosexual ideals and fighting for LGBTQI+ rights, sexuality and diverse identities are core aspects of Cook Islands life (Sadaraka, 2017; Futter-Puati 2017; MFAI, 2020).

In her exegesis “Api’ianga Tupuanga Kopapa”, Futter-Puati (2017) reports that youth and people with fluid or alternative sexual identities in the Cook Islands are unsupported by the community, with higher vulnerability to marginalisation and bullying, and high suicide risk (p. 174)

The Drivers of Change report mentions that equal opportunities and rights for the LGBTQI+ community has an impact on Cook Islands society (MFAI, 2020, p. 13). Movements to recognise LGBTQI+ rights in the Cook Islands indicate incremental change to a more inclusive Cook Islands society; recent changes to the Cook Islands Crimes Bill concerning the decriminalisation of same sex relationships has pushed LGBTQI+ rights into the spotlight of public discourse. In a statement on

¹ Developed in the 1850s, the indigenous movement by certain New Zealand Māori tribes was established to stop the loss of land, promote traditional values and culture, and maintain law and order (Papa & Meredith, 2012).

LGBTQI+ rights, Futter-Puati mentions dialogue with Cabinet leaders included reference to contravention of international law; if same sex relationships are criminalised in the Cook Islands it is a violation of basic human rights (Samoglou, 2020b). Te Tiare Association President Valery Wichman states that the campaign to recognise LGBTQI+ rights will continue on, while the Select Committee tasked with facilitating public consultations on the Crimes Bill reported that criminalisation of same sex relationships violates Cook Islands Constitutional law.

PART II

2.0 Introduction

This part presents signals that were discovered in the analysis as linking to topics represented in the current NSDP 2016-2020. Most of the signals here are highlighted for not specifically being found in the NSDP 2016-2020, however are part of growing trends in the Cook Islands and beyond.

2.1 Environment

2.1.1 Living Modified Organisms (LMOs) and Genetically Modified Organisms (GMOs)

Currently the Cook Islands does not have an action plan or targets to limit or assess the potential threats of LMOs and GMOs (CIG, 2020a). LMOs and GMOs could become prominent as global warming impacts food security (Hunter, 2016). Hook (2019) writes that bioengineered plants that can survive drought or flooding are currently being developed, while Resnik (2017) finds that genetically modified mosquitoes that assist in eliminating vector-borne diseases have been trialled. The wider impact of this kind of biotechnology on society and the environment is unknown as the industry is still relatively young (Maralla & Bharathi, 2015). However, Treillard (2019) warns that LMO's and GMO's are associated with irreversible damage to the environment and human health (p. 113), suggesting that LMOs and GMOs can still impact the Cook Islands even if the country does not regard biotechnology a threat.

2.2 Economy

2.2.1 Trade

One report and a news article reveal calls to equalise the trade deficits with New Zealand and Australia (Birnie & Tierney et al, 2018; Radio New Zealand [RNZ], 2020). Birnie and Tierney et. al report that this could phase out reliance on aid to fund Cook Islands primary services in Health and Education, ensuing more independence and reliable financial planning for the future of these essential sectors (Ibid., p. 14).

2.2.2 Foreign Direct Investment (FDI)

Foreign direct investment is an important part of economic development. It can bring jobs to local communities and drive up competition, bringing down consumer prices while boosting a company's local market access and sales (Schiff & Winters, 2003). In the Pacific, there is concern about the costs of FDI-linked financial outflows and impact on local culture (Milne, Deuchar & Berno et al. 2017, p. 102). There is not a lot of data on foreign direct investment in the Cook Islands, however, is described as "sluggish" (Asian Development Bank [ADB], 2015, p. 4).

At the Drivers of Change consultations on Rarotonga, participants indicated that the impacts to the economy caused by the COVID-19 pandemic requires a sustainable recovery model response incorporating private sector investment (MFAI, 2020). There is concern about when the economy will rebound and what it would look like (Ibid., p. 25).

Milne, Deuchar and Berno et al. (2017) describe Ethical Impact Investment (EII) as a “new investment class” in the Pacific, where investors value development returns as much as financial returns (p. 112). It is presented as a culturally appropriate and sustainable approach to foreign investment that can be linked to a country’s national sustainable development goals. Birnie and Tierney et al. (2018) recommend in their Public Expenditure Review of government environment, economic and social sectors that foreign investment and foreign aid could be better aligned to the Cook Islands’ national sustainable development goals (Ibid., 2018; Milne, Deuchar & Berno et al. 2017).

Green & Blue Economic Models

Participants at the Drivers of Change consultations on Rarotonga indicated evolving from an extractive economic model to a sustainable model is an impactful driver of change (MFAI, 2020, p. 26 & 29), with the suggestion that the whole of Cook Islands’ natural resources should be valued. Some island states across the world have already started to value their natural resources for a Green and/or Blue Economy (Dornan & Morgan et al., 2018), while the Cook Islands is considering a Green Economy approach as part of its proposed Economic Development Strategy (MFEM, 2020).

Readiness for Global Shocks other than Climate Change

Although the Cook Islands had strong fiscal policies that meant the country could manage the effects of the COVID-19 pandemic relatively well (Samoglou, 2020a), it brought to the fore weaknesses in Cook Islands’ readiness to respond to global shocks other than climate change. At the Drivers of Change consultations, participants identified uncertainties around whether current fiscal policy can realistically adapt to external shocks as well as climate change-related disasters (MFAI, 2020, p. 24 & 35).

2.2.4 Cottage Industries

With 87.7% of working age people engaged in own-use production, there is potential in the Cook Islands for expansion of cottage industry exports (CIG, 2020b; Petterson & Tawake, 2018). A cottage industry involves production of goods or services by a household to trade or sell (Prentice, 1983). Own-use production, while mostly not for financial gain, can evolve into cottage industry once external demand, local or international, hits (Ikemoto, 1996).

2.3 Society

2.3.1 Protecting our most vulnerable

A country's development progress is impacted by how it includes and provides for its most vulnerable populations (United Nations [UN], 2016).

Four reports show that the Cook Islands is not doing enough to care for and protect the most vulnerable in our community, including; children and youth; all peoples with disabilities; women; the elderly; and the LGBTQI+ community (Anderson & Barnes et al., 2017; Frackowiak, 2019; Gorman, 2020; Worth, Rawstorne & Gorman et al., 2016).

Although indicators in the NSDP 2016-2020 include caring for the elderly, infirm, disabled, promoting gender equality and youth wellbeing (Office of the Prime Minister [OPM], 2016, p. 36), there are significant disparities across geographic areas in access to health and education services, and little to no services for those with disabilities. This is exasperated by an increased vulnerability to natural disasters (Anderson & Barnes et al., 2017; Gorman, 2020; Worth, Rawstorne & Gorman et al., 2016).

A 2017 UNICEF Situational Analysis on the Cook Islands found that resources are not spread equitably across geographic regions, with the Pa Enua unable to provide essential services such as health and education to ensure a thriving child and youth population (Anderson & Barnes et al., 2017, p. 24, 28, & 42).

A study on ageism by Frackowiak, Oleszkiewicz & Löckenhoff et al. (2019) revealed that Cook Islands' societal attitudes about aging are negative, despite the perception that island life or island communities include close contact with the elderly and thus treat older generations better than in industrialised countries (p. 4). As the study notes, this could impact the way older persons are actually treated, and leave gaps in policy to reduce discrimination against the aged.

In a recent rapid assessment of the government response to the COVID-19 pandemic, Gorman (2020) found that the economic and social impacts of the pandemic, including the government response, have adversely affected the most vulnerable in the country. The elderly and their caregivers potentially faced financial hardship and increased stress; domestic violence rates increased; the government response had not focused on the fact that women and peoples with disabilities were more likely to be disproportionately affected by the pandemic; there were concerns on the wellbeing of children and youth; while gaps in the migrant worker employment system were revealed (p. 3).

Sadaraka (2017) reports that customer-initiated sexual harassment in the Cook Islands disproportionately affects female employees in the hospitality industry; a pervasive issue that needs addressing through policy, procedures and training (p. 153). The study suggests sexual harassment is a factor in workers leaving the industry and the country.

Youth, especially girls and LGBTQI+ are experiencing unhealthy, and often violent, relationships and first sexual experiences. Available services are not easily accessible nor considered emotionally safe spaces by users. They are consequently underutilised (Futter-Puati, 2017; Worth, Rawstorne & Gorman et al. 2016).

2.3.2 Connecting Cook Islanders

The Office of the Public Service Commissioner (OPSC) recognises that Cook Islanders living overseas are a valuable resource that are not tapped in to (2018). Raymond (2017) found through their study that it is also difficult for Cook Islanders living overseas to connect to or keep connections open with official channels in the Cook Islands (p. 68), however that there is potential to create an online international network of professionals of Cook Islands descent, to keep in touch and as a pool for technical assistance (Ibid, 2017; ACL, 2019).

2.3.3 Alcohol and Substance Abuse Rehabilitation

Participants attending consultations for the Drivers of Change Report (MFAI, 2020) indicated that lack of rehabilitation services for drug and alcohol abuse has increasingly been impacting Cook Islands society with flow on effects to mental health and wellbeing, family violence, road and traffic accidents, crime and an unproductive workforce.

2.4 Culture

2.4.1 Archaeological Sites

Although preservation of items important to cultural heritage is addressed in the NSDP 2016-2020, archaeological sites are not explicitly mentioned. According to Downes, Mulville and Richards et al., the marae and kōutu of the Cook Islands have value to the current generations (2018). Although more for political and social uses than religious or ritual, these spaces have become ‘living’, with more families restoring or building new sites. More information about their histories, and thus the histories of the Cook Islands people, can be revealed while there is a need to continue searching for and developing these sites through archaeology (Downes, Mulville & Richards et al., 2017).

2.5 Climate Change

2.5.1 Climate change mobility

In a study on climate change mobility, Newport (2019) writes that **emigration and climate change** are a significant aspect of climate change adaptation, however, is not thought of as linked and therefore as a national issue (Newport, 2019). The study found that climate change mobility is only mentioned twice in key government documents and is not part of the core government policy suite (p. 146).

3.0 Conclusion

From focusing on developing internally to maturing the country's international partnerships, a variety of themes were discovered through this analysis. Horizon scanning of 57 research reports and government commissioned reports revealed signals that the Cook Islands could be:

- 1) A leader in challenging power asymmetry in bilateral relations
- 2) Heading towards a regenerative agricultural future
- 3) A leader in digital industry
- 4) A challenger of the Western status quo and advocate for indigenous identity
- 5) A more inclusive society

Moreover, emerging issues around biotechnology, trade, protecting society's most vulnerable, unearthing monumental history and addressing climate change caused migration could impact the Cook Islands' future generations.

Recommendations

There are some signals that could reveal the beginning of something that will slowly come about over a few years, while others will have an obvious impact in the short to mid-term. It is recommended that the following issues are prioritised first:

- protecting the most vulnerable in Cook Islands society, particularly of the Pa Enua; this includes children, women, peoples with disabilities, the elderly and the LGBTQI community
- Committing the whole of the tourism sector to sustainability or regenerative tourism
- Invest and develop capacity for a completely digital Cook Islands

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Appendices

APPENDIX I

Issues Matrix

| Related to what / context | Significance / impact potential | Explanation | Signal | Cluster | Source |
|--------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Large state-small state power asymmetry | High impact-high probability | High probability because each bilateral relationship with larger countries is different and requires significant skill and capacity, which the Cook Islands does have, to negotiate favourable terms and meet Cook Islands interests (Wi-Kaitaia, 2020) | Equalising power asymmetry in SBM partnerships will benefit national wealth | Diplomacy | Petterson, M. G., Tawake, A., (2018, January 1). Cook Islands (South Pacific) experience in governance of seabed manganese nodule mining. In Ocean and Coastal Management, Vol. 167, pp. 271-287. Retrieved from: http://www.sciencedirect.com/science/article/pii/S096456911830334X Accessed: 2020/11/23. Ministry of Foreign Affairs and Immigration [MFAI], (2019). Statement of Strategic Intentions 2019-2024. Avarua, Cook Islands: Cook Islands Government. |
| Triangular co-operation in international relationships | High impact-high probability | High probability because the Cook Islands does have the skill, experience and capacity to negotiate triangular approach in future projects of national importance (Wi-Kaitaia, 2020) | Equalising power asymmetry in international relationships through triangular approach could help the CI achieve its interests | Diplomacy | Wi-Kaitaia, M., (2020, July). Exploring Pacific Small Island Developing State Trilateral Engagement with China. Master's Thesis. Beppu, Japan: Ritsumeikan Asia Pacific University. |
| Regional Security | High impact-high probability | High probability because the Ministry of Foreign Affairs and Immigration includes regional security in their Strategic Plan (MFAI, 2019) | Large power geostrategic competition in the Pacific impacts Cook Islands aspirations for Pacific regionalism and regional security | Diplomacy | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Regenerative Tourism | High impact-high probability | High probability because the country has already taken its first steps with the Mana Tiaki programme (Te Ipukarea Society, 2020) | Evolve from an extractive model of tourism to a regenerative one | Regenerative Approach | Becken, S., (2020, July 31). Regenerative Tourism – Opportunity for Tourism Recovery? Retrieved from: https://pureadvantage.org/news/2020/07/31/regenerative-tourism-opportunity-for-tourism-recovery/ Accessed: 2020/11/22. |
| Regenerative Tourism | High impact-High probability | High probability because the Cook Islands | Regenerative tourism could overtake sustainable tourism, uses circular economy components and equity principles | Regenerative Approach | Glusac, E., (2020, August 27). Move Over Sustainable Travel, Regenerative Travel Has Arrived. Retrieved from: https://www.nytimes.com/2020/08/27/travel/travel-future-coronavirus-sustainable.html Accessed: 2020/11/23. |

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|-----------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slow Tourism | High impact-low probability | Assuming low probability because the Cook Islands is still grasping sustainable tourism. Announcement made that a Cook Islander has started his own airline business | Slow tourism interest internationally | Regenerative Approach | Tucker, C., (2018, November). The Views, Values and Practices of Rarotonga Tourists towards the Local Environment. Report. Rarotonga, Cook Islands: Office of the Prime Minister. |
| Regenerative Tourism/Eco-tourism | High impact-high probability | High probability because the effects of COVID-19 mean a rethinking of the Cook Islands tourism approach is happening (MFAI, 2020) | Cook Islands is searching for alternative tourism models following the impact of the COVID-19 pandemic | Regenerative Approach | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Regenerative Agriculture | High impact-high probability | High probability because the Ministry of Agriculture is already investing in ecosystems approach to food production | Regenerative agriculture gaining momentum internationally, replace carbon intensive food-system with carbon neutralising agriculture | Regenerative Approach | Payne, E., (2019, May 28). Regenerative agriculture is getting more mainstream. But how scalable is it? Retrieved from: https://agfundernews.com/regenerative-agriculture-is-getting-more-mainstream-but-how-scalable-is-it.html Accessed: 2020/11/22. One Earth, (2020, November 23). Regenerative agriculture and food systems. Retrieved from: https://www.oneearth.org/regenerative-agriculture-and-food-systems/ Accessed: 2020/11/23. |
| Regenerative Agriculture | High impact-high probability | Rated as high impact at the MFAI Drivers of Change consultations, high probability because the issue is impacting livelihoods, as suggested by participants (MFAI, 2020) | Livelihoods impacted by agriculture supplying mainly to the tourism market, the current model is inflexible and narrow for a world impacted by the COVID-19 pandemic Increasingly influential alternative lifestyles such as veganism and focus on organics are shifting demands on the agriculture industry | Regenerative Approach | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Regenerative Agriculture | High impact-high probability | High probability because the Ministry of Agriculture is already planning for food security needs (CIG, 2020) | Crop banks establishment and traditional knowledge courses for ecosystem agriculture | Regenerative Approach | Cook Islands Government [CIG], 2020, November 5). 6th National Report for the Convention on Biological Diversity. Retrieved from: https://chm.cbd.int/database/record?documentID=252891 Accessed: 2020/11/22. |
| Regenerative Agriculture/Climate Change | High impact-low probability | Assuming low probability because sequestering carbon through agriculture requires a change in practices by each and every individual farmer to make even a small contribution to mitigating climate change through agriculture | Sequester carbon through regenerative organic agriculture | Regenerative Approach | Rodale Institute, (2015). Regenerative Organic Agriculture and Climate Change: A Down-to-Earth Solution to Global Warming. Retrieved from: https://rodaleinstitute.org/wp-content/uploads/rodale-white-paper.pdf Accessed: 2020/11/23. |

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|------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Innovation and economic value | High impact-low probability | Assuming low probability because innovation also requires a change in the standard of education in the Cook Islands, or seriously investing in connecting with Cook Islanders overseas | Innovation drives economic value | Innovation | Avaroa Cable Limited, (2019). Seizing the Opportunity: Maximising the impact of the Manatua One Polynesia Cable in the Cook Islands. Rarotonga, Cook Islands: Avaroa Cable Limited. |
| ICT-centric Cook Islands | High impact-High probability | High probability because participants envisioned the Cook Islands as a digital society | Cook Islands will be driven by a completely digital society; virtual workplaces & education; increased cybercrime; online transnational crime | Innovation | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Online business and e-industry | High impact-low probability | Assuming low probability because high-speed connectivity needs to reach the Pā Enuā | Potential to have more Cook Islanders online | Innovation | Avaroa Cable Limited, (2019). Seizing the Opportunity: Maximising the impact of the Manatua One Polynesia Cable in the Cook Islands. Rarotonga, Cook Islands: Avaroa Cable Limited. |
| Online business and e-industry | High impact-low probability | Assuming low probability because high-speed connectivity needs to reach the Pā Enuā | Potential for e-industry | Innovation | Petterson, M. G., Tawake, A., (2018, January 1). Cook Islands (South Pacific) experience in governance of seabed manganese nodule mining. In <i>Ocean and Coastal Management</i> , Vol. 167, pp. 271-287. Retrieved from: http://www.sciencedirect.com/science/article/pii/S096456911830334X Accessed: 2020/11/23. |
| Blockchain Technology | High impact-low probability | Blockchain is set to be the new way of doing finance (Fanusie, 2020). Assuming low probability because it might take a lot of convincing of current leaders that blockchain is the future. | Cryptocurrency use is entering the Pacific with the Marshall Islands announcing they will create their own cryptocurrency | Innovation | Paul, D., (2019, September 3). Why the Marshall Islands Is Issuing Its Own Cryptocurrency. Retrieved from: https://www.coindesk.com/why-the-marshall-islands-is-issuing-its-own-cryptocurrency Accessed: 2020/11/24. |
| Unmanned flight/drone transport | High impact-low probability | Low probability because although inter-island transport is a known issue, drone freight is not on the Cook Islands radar (MFAI, 2020). | As demand for alternative energy sources and low-cost transport increase | Innovation | Stolaroff, J. K., Samaras, C., O'Neill, E. R., Lubers, A., Mitchell, A. S., Ceperley, D., (2018). Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery. In <i>Nature Communications</i> Issue 9, No. 409, pp. 1-13. Retrieved from: https://doi.org/10.1038/s41467-017-02411-5 Accessed: 2020/12/09. |
| Drone freight in disaster response | High impact-high probability | High probability as drone freight was used in disaster relief efforts in recent events in the Pacific (UNICEF, 2020) | Drone scoping and freight of essential items and medical goods is increasingly being used in emergency response | Innovation | Lacanale, L., (2018, July 22). Drones: 5 reasons why the World Food Programme is using them. Retrieved from: https://insight.wfp.org/drones-5-reasons-why-the-world-food-programme-is-using-them-20ca47e73b56 Accessed: 2020/12/11. UNICEF, (2020). Drones: Addressing transport, connectivity and better emergency preparedness. Retrieved from: https://www.unicef.org/innovation/drones Accessed: 2020/12/11. |
| Large Ocean State concept | Low impact-high probability | The Cook Islands Ministry of Foreign Affairs and Immigration already utilise the term Large Ocean State (MFAI, 2019). Identity/National Branding is not in the current NSDP 2016-2020. | Discarding Western concepts of identity for local concepts such as Large Ocean state or Oceanic Island state | Identity | Newport, C. A., (2019, February). Vaka Moana as Policy Space. Doctoral Thesis. Auckland, New Zealand: University of Auckland. |

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| Indigeneity | High impact-low probability | Assuming low probability because as the Cook Islands remains a majority indigenous culture there is no compelling need for placing indigenous first | Locals are using indigenous approaches to ICT, increasing its use for education and protecting culture, and rejecting Western approaches to ICT | Identity | Stephany, C. T., (2017, December). Teachers' Perceptions of the Epistemic Interface Between Indigeneity and Technology in the Cook Islands. Doctoral Thesis. Los Angeles, CA: University of Southern California. |
| Traditional knowledge for sustainability | High impact-low probability | Assuming low probability because socioecological approaches from antiquity don't necessarily translate to better dealing with extraordinary, human-caused climate change | Need to record how atoll societies adapted and thrived in the changing circumstances of atoll living | Identity | Cramb, J., (2020). Manihiki and Rakahanga: The Historical Ecology of a Dual-Atoll Cluster. Doctoral Thesis. Athens, GA: University of Georgia. |
| International Recognition of Indigeneity | Low impact-high probability | Assuming low impact because the Cook Islands is a homogenous society with the majority of the population of Cook Islands descent, despite a need to overcome colonialism and neo-colonialism international movements to recognise indigenous rights would not necessarily make an impact here | Indigenous Polynesian connection between the Cook Islands and New Zealand recognised as an important factor of the countries' relationship | Identity | Ministry of Foreign Affairs and Trade [MFAT], (2015). Voyage to Statehood: 50 years in the Cook Islands-New Zealand relationship. Wellington, New Zealand: Ministry of Foreign Affairs and Trade. Newport, C. A., (2019, February). Vaka Moana as Policy Space. Doctoral Thesis. Auckland, New Zealand: University of Auckland. |
| Sexuality | High impact-high probability | High probability because LGBTQI+ movement in Rarotonga will continue campaigning | Crimes Bill amendments place LGBTQI+ rights in the spotlight, with constitutional and international implications | Identity | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. Samoglou, E., (2020b, November 25). LGBTQ+ groups slam bill deferral. Retrieved from: https://www.cookislandsnews.com/internal/national/local/lgbtq-groups-slam-bill-deferral/ Accessed: 2020/12/11. |
| Living Modified Organisms and Genetically Modified Organisms | High impact-low probability | Low probability because the Cook Islands does not have an action plan or targets to limiting or assessing the potential threats of LMOs and GMOs (CIG, 2020) | Genetically Modified plants that can survive drought and flooding are currently being developed | Environment | Hook, L., (2019, January 30). Could a superplant save the planet? Retrieved from: https://www.ft.com/content/aa055276-2419-11e9-8ce6-5db4543da632 Accessed: 2020/11/29. |
| Living Modified Organisms and Genetically Modified Organisms | High impact-low probability | Low probability because the Cook Islands does not have an action plan or targets to limiting or assessing the potential threats of LMOs and GMOs (CIG, 2020) | Genetically engineering plants and organisms to provide alternative hydrocarbon fuels can help mitigate climate change | Environment | Hunter, P., (2016, July). The potential of molecular biology and biotechnology for dealing with global warming. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4931561/ Accessed: 2020/11/29. |
| Living Modified Organisms and Genetically Modified Organisms | High impact-low probability | Low probability because the Cook Islands does not have an action plan or targets to limiting or assessing the potential threats of LMOs and GMOs (CIG, 2020) | Mosquitos are currently being genetically engineered to assist in elimination of vector-borne diseases | Environment | Resnik, D. B., (2017, September). Field Trials of Genetically Modified Mosquitos and Public Health Ethics. In American Journal of Bioethics, Vol. 17, No. 9, pp. 24-26. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6072261/ Accessed: 2020/11/29. |

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|----------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trade | High impact-low probability | Assuming low probability because New Zealand might see the trade deficit as an exchange for aid. | Need to equalise the trade deficit with New Zealand and phase out New Zealand Aid Core Sector Support | Economy | Birnie, D., Tierney, P., Smith, J., Cribbens, N., (2018, October 4). Public Expenditure Review: Environment, Economic and Social Sectors for the Cook Islands Government 2018 – overall observations and recommendations. Rarotonga, Cook Islands: Ministry of Finance and Economic Management. |
| Trade | High impact-low probability | Assuming low probability because New Zealand might see the trade deficit as an exchange for aid. | Need to equalise the trade deficit with New Zealand by negotiating preference for fruits and vegetables | Economy | Radio New Zealand, (2020, November 10). Hopes that NZ talks in Cook Islands could explore trade. Retrieved from: https://www.rnz.co.nz/news/pacific/430241/hopes-that-nz-talks-in-cook-islands-could-explore-trade Accessed: 2020/11/23. |
| Foreign Direct Investment | High impact-low probability | Assuming low probability because it takes time for mindsets to change | Ethical Impact Investment is gaining interest as a “new investment class”; a culturally appropriate and sustainable approach to foreign investment, and can be linked to a nation’s development goals | Economy | Milne, S., Deuchar, C., Berno, T., Taumoepeau, S., Pusinelli, M., Raymond, J., (2017, September). Private Sector Investment in the Pacific. Retrieved from: https://apo.org.au/sites/default/files/resource-files/2017-09/apo-nid246971.pdf Accessed: 2020/11/23. |
| Sustainable Economic Model | High impact-High probability | High probability because the Cook Islands government has included Green Economy approach in its proposed Economic Development Strategy 2030 (MFEM, 2020) | Time for the Cook Islands to change from an extractive economic model to sustainability | Economy | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Green & Blue Economic Models | High impact-High probability | High probability because the Cook Islands government has included Green Economy approach in its proposed Economic Development Strategy 2030 (MFEM, 2020) | Island nations around the world are valuating their natural resources for Green and/or Blue Economic approaches | Economy | Dornan, M., Morgan, W., Cain, T. N., Tarte, S., (2018, June 26). What’s in a term? “Green growth” and the “blue-green economy” in the Pacific Islands. In <i>Asia Pacific Policy Studies</i> , Vol. 5, Issue 3. Retrieved from: https://onlinelibrary.wiley.com/doi/full/10.1002/app5.258 Accessed: 2020/12/13. |
| Cottage industries | Low impact-high probability | Assuming low impact because this kind of industry helps individual families more than society as a whole. High probability because 87.7% of working-age people are engaged in own-use production | There is potential in the Cook Islands for expansion of cottage industry exports | Economy | Petterson, M. G., Tawake, A., (2018, January 1). Cook Islands (South Pacific) experience in governance of seabed manganese nodule mining. In <i>Ocean and Coastal Management</i> , Vol. 167, pp. 271-287. Retrieved from: http://www.sciencedirect.com/science/article/pii/S096456911830334X Accessed: 2020/11/23. |
| Non-climate change related disaster readiness | High impact-High probability | High impact and high probability because the COVID-19 pandemic exceeded expectations of the true devastating impact of global pandemics | Public doubt over whether current fiscal policy can manage both non-climate change and climate change disasters | Economy | Ministry of Foreign Affairs and Immigration [MFAI], (2020, September). 2050 Strategy for the Blue Pacific Continent Drivers of Change: Cook Islands Consultations Report. Rarotonga, Cook Islands: Ministry of Foreign Affairs and Immigration. |
| Care and opportunities for children of the Pa Enea | High impact-high probability | High probability because a Cook Islands National Policy Framework for Children was developed in response to the UNICEF findings. The NSDP 2016-2020 does not specifically target children in the Pa Enea | The gap between children in the Pa Enea and Rarotonga in optimum care and opportunities will widen, exasperated by increased vulnerability to natural disasters | Society | Anderson, K., Barnes, R., Raoof, A., Hamilton, C., (2017, December). Situation Analysis of Children in the Cook Islands. Suva, Fiji: United Nations Children’s Fund [UNICEF] Pacific. |
| Ageism practice in the Cook Islands | High impact-low probability | Low probability because depopulation has resulted in lack of caregivers for the elderly and | Societal attitudes towards ageing are negative in the Cook Islands | Society | Frackowiak, T., Oleszkiewicz, A., Löckenhoff, C. E., Sorokowska, A., Sorokowski, P., (2019). Community size and perception of older adults in the Cook Islands. In |

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|-------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | transfer of knowledge or exposure to the elderly in the community (Gorman, 2020; Frackowiak, Oleszkiewicz & Löckenhoff et al., 2019) | | | <i>Public Library of Science ONE</i> , Vol. 14, No. 7. Retrieved from: https://doi.org/10.1371/journal.pone.0219760 Accessed: 2020/11/13. |
| Vulnerability during COVID-19 | High impact-Low probability | Assuming low probability for change because policies supporting the most vulnerable before the pandemic were not implemented | COVID-19 pandemic adversely affected vulnerable communities that can resonate for the near future | Society | Gorman, H., (2020, August). Rapid Assessment of COVID-19 Preparedness, Mitigation, and Response Measures and its Consideration of the Poor and Vulnerable Groups in the Cook Islands. Rarotonga, Cook Islands: Cook Islands Government. |
| Worker rights/gender discrimination | High impact-low probability | Low probability because while acknowledging there is a gap in policy for the industry, the results of the study were minimised (Rex, 2018). | Lack of policy, procedures and training to address sexual harassment in the hospitality industry impacting sense of safety and security, especially for female workers, the industry loses workers as a consequence | Society | Sadaraka, L. E., (2017). An inquiry into employees' experiences of sexual harassment by customers in the Cook Islands hospitality industry. Master's Thesis. Auckland, New Zealand: Auckland University of Technology. |
| Youth sexual health and sexuality | High impact-low probability | High impact because children and youth are change-agents for society, their wellbeing is the wellbeing of all (The University of Auckland, 2020). Low probability because Cook Islands societal approach to sexual health and sexual health education is complicated and often influenced by outdated religious doctrine (Futter-Puati, 2017) | Most youth are experiencing unhealthy, and often violent, relationships and sexual experiences. Services are available, however not easily accessible. | Society | Futter-Puati, D. M., (2017, February). Ap'i'anga Tupuanga Kopapa: Sexuality Education in the Cook Islands. Doctoral Thesis. Melbourne, VIC: RMIT University. |
| Sexual health and sexuality | High impact-low probability | High impact because youth of any gender and sexual orientation are change-agents for society, their wellbeing is the wellbeing of all (The University of Auckland, 2020). Low probability because Cook Islands societal approach to sexual health and sexual health education is complicated and often influenced by outdated religious doctrine (Futter-Puati, 2017) | Youth and LGBTQI peoples are in need of confidential and safe spaces for sexual health testing, advice and counselling services | Society | Worth, H., Rawstorne, P., Gorman, H., O'Connor, M., McGill, S., (2016). Cook Islands Pacific Multi-Country Mapping and Behavioural Study: HIV and STI Risk Vulnerability among Key Populations. Retrieved from: https://www.ashm.org.au/international/our-programs/pacific-multicountry-mapping-and-behavioural-study/ Accessed: 2020/11/20. |
| Cook Islanders overseas | High impact-high probability | High probability because the Office of the Public Service Commissioner understands the issue (OPSC, 2018) | Need to create an online international network of Cook Islands professionals | Society | Raymond, L. L., (2017). Tertiary Education Migration and Cook Islands' Development. Master's Thesis. Wellington, New Zealand: Victoria University of Wellington. |
| Alcohol and drug rehabilitation | High impact-high probability | High probability because it is an ongoing issue that could become worse (MFAI, 2020) | Lack of support services or rehabilitation for alcohol and substance abuse | Society | Ministry of Foreign Affairs and Immigration [MFAI], (2019). Statement of Strategic Intentions 2019-2024. Avarua, Cook Islands: Cook Islands Government. |

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|--------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Archaeological sites and discoveries | High impact-low probability | Assuming high impact because archaeological sites can make significant contributions to cultural revival and economic return through tourism, as in Highland Paradise | Need to continue searching for and developing sites discussed in oral and written history | Culture | Downes, D., Mulville, J., Richards, C., Welham, K., (2018). Te Umu o Ngati Arera: Archaeological Survey Report, Draft Report 1. Rarotonga, Cook Islands: Cook Islands Tangible Cultural Heritage. |
| Climate change mobility | High impact-low probability | Climate change mobility is only mentioned twice in Cook Islands climate change policy frameworks, possibly because the link between climate change and depopulation is not yet made (Newport, 2019) | Climate change mobility is a significant aspect of climate change adaptation and needs to be explored further in policy | Climate Change | Newport, C. A., (2019, February). Vaka Moana as Policy Space. Doctoral Thesis. Auckland, New Zealand: University of Auckland. |



NSDA 2020+ FORUM NOTES REVIEW

Research conducted for the Cook Islands National
Sustainable Development Agenda 2020+

Report prepared for
Office of the Prime Minister
Central Policy and Planning Office

by Rachel Michele Teana Reeves
December 2020

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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM or TVKP. Errors or omissions that may have been unwittingly made are regretted.

Executive Summary

This report provides an analysis of notes taken during the Our Cook Islands Legacy Agenda 2020+ Forum. The forum, held on 3 December 2020, was open to the public and featured breakout sessions focussed on discussions about national values. Participants were also asked to share their vision for the next century and their views on issues influencing the well-being of three age groups chosen from the following list: birth-1000 days, 3-5 years old, 5-12 years old, 12-15 years old, 16-17 years old, 18-25 years old, 26-40 years old, 41-60 years old, and 60+. Notes from sessions were reviewed using the scanning methodology, which seeks to locate weak signals, or early signs of potentially important social, cultural, environmental, political, or economic trends. This report discusses the signals located in the process. The purpose of this research is to add to a growing body of research designed to inform the National Sustainable Development Agenda 2020+.

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I. Introduction

As the National Sustainable Development Plan 2016-2020 (Te Kaveinga Nui) nears its end, the Koutu Mana Tutara O Te Ipukarea - Office of the Prime Minister (OPM) Central Policy and Planning Office (CPPO) is engaged in the work of developing a new future-oriented vision for the Cook Islands. Foresight is key to mitigating risks, leveraging opportunities, and achieving efficient, effective leadership. The purpose of this research is to suggest which seeds of change planted in the Cook Islands are likely to bear fruit.

This report intends to highlight some of the potentially transformative trends, ideas, and conversations identified during a review of notes taken during breakout sessions at the Our Cook Islands Legacy Agenda 2020+ Forum. The sessions, held 3 December 2020, were designed to solicit views from members of the community pertaining to national priorities and well-being. According to forum organisers, about 200 people attended the event and 150 participated in breakout sessions.

The researcher employed a methodology that attempts to detect early signs of important social, cultural, environmental, political or economic developments. Its intent is to locate weak signals, or indicators of disruptive trends. Signals identified during this review must be understood in the context of the historical, social, economic, environmental, technological, and political forces at work in the Cook Islands (and beyond it). A signal related to a rest home for the elderly, for example, should be considered in relation to a culture being evolved by economic growth. This is significant because for most of the country's recorded history, families have lived intergenerationally. A signal focussed on technology can be understood in relation to the installation of a fibre-optic cable and the removal of a legal monopoly on telecommunications in 2020.

This report intends to add to a growing body of research that will inform the National Sustainable Development Agenda 2020+, which includes reviews of digital media, social media, consultations with stakeholders, policy, and published papers.

II. Methodology

This research employed the scanning methodology, which seeks to identify weak signals. The researcher reviewed about 40 pages' worth of notes taken during breakout sessions at the Our Cook Islands Legacy Agenda 2020+ Forum. Each session was steered by a facilitator toward discussion of values and well-being. Participants were also asked to share their views on issues facing three age groups chosen from the following list: birth-1000 days, 3-5 years old, 5-12 years old, 12-15 years old, 16-17 years old, 18-25 years old, 26-40 years old, 41-60 years old, and 60+.

Several templates were used to capture and organise the information located during the scanning process. (See Appendix for template.) Possible weak signals were entered into the template and tagged with a theme or themes (social, economic, environment, technology, education, or governance). When a weak signal appeared frequently, the researcher would include two or three versions of it to indicate emphasis. Relevant comments and possible implications and connections were also recorded.

III. Limitations

One notable limitation of this research relates to the sample of people who participated in the forum. The event was open to anyone on Rarotonga who was able to attend one half-day meeting on a weekday. The sample size was small. Based on population estimates published by the Ministry of Finance and Economic Management in March 2020, the notes scanned during this review represent the views of 0.8 per cent of the population.

Another notable limitation of the review was the lack of detail in notes taken during breakout sessions. Some were composed of a single word only; for example, a note that appears frequently is “disability”. Another example is “support for dementia”; what kind of support the participant was referring to is unclear.

A further limitation of this research relates to the subjectivity of the researcher. Weak signals must seem odd and new and interesting, and categorising them as such was, within the context of this research, a subjective exercise. One method of managing this bias was eliminating signals too resonant of the goals and indicators laid out in the National Sustainable Development Plan 2016-2020. The margin for human error also warrants mention.

IV. Positionality

The researcher’s subjectivity is shaped, in part, by experience writing in and about the Cook Islands as a working journalist, author, and communications consultant for various stakeholders in Cook Islands society, including government ministries such as the Marae Moana Coordination Office, the Ministry of Marine Resources, and the National Superannuation Fund, and non-profit organisations such as Te Ipukarea Society, Korero O Te Orau, and Autism Cook Islands. This experience, in addition to years of reporting for *Cook Islands News*, lent the researcher a nuanced understanding of political, economic, social, and environmental issues facing the Cook Islands. Other relevant experience includes authoring a book about a fatal cyclone in the northern islands, which led to a deeper understanding of the disparities between Rarotonga and the pa enua, and managing a storytelling project that highlights traditional knowledge as a pathway to healthy, sustainable living. It is also worth noting that the researcher has Cook Islands heritage and grew up in Los Angeles.

V. Findings

The research yielded 54 weak signals. Forty-three of them were tagged as social. Education and economy recorded 15 signals each. Five signals related to governance, three related to technology, and two related to the environment. Some signals appeared in multiple groups; for example, a signal suggesting a mentorship programme could be both “social” and “economic”.

In an effort to find commonalities, the researcher also grouped signals according to more specific themes; for example, a signal relating to the stress experienced by parents of disabled children and a signal pointing to a growing need for educators to work with disabled people were both categorised as “disability”. Disability was also the theme with the highest number of signals. The second most common topic was mental health. Next was a tie between parenting and technology. Other themes with multiple signals include agriculture, career support, and care for the elderly.

Some signals are closely related to goals and strategies outlined in the National Sustainable Development Plan 2016-2020, but suggest new ways of understanding them. For example, the plan identifies increased agricultural production as a target goal, but a signal identified during this review suggests each island should become agriculturally self-sufficient and independent of the global economy. As another example, the plan suggests rates of reported incidents of domestic violence can be indicators of justice. A newly identified signal suggests broader policy and program frameworks that consider poverty and parenting as strongly correlated with domestic violence. Other weak signals are outliers, such as suggestions that “High tech ELON MUSK” might fill some of the perceived gaps in Cook Islands society, that the northern islands should have their own hub for healthcare, and that making time for play is an integral part of achieving well-being.

VI. Discussion

Eighty per cent of signals located during this review were social in nature, whereas three pertained to technology and three were concerned with the environment. By contrast, a separate review of media from the last 24 months yielded mostly signals related to technology and the environment.

One possible explanation for the discrepancies between signals identified during this review and signals located during scans of other materials centres on the questions posed by facilitators. During breakout sessions at the forum, table leaders initiated conversations about national values and well-being. By contrast, during consultations with stakeholders in Cook Islands society, facilitators posed questions about values, well-being, digitisation, bilingualism, and sovereignty, among other topics.

Another explanation relates to the demographic profile of participants. According to an organiser, forum attendees included “government (from HOMs to junior staff), non-government organisations, pa enua representatives, teachers, tertiary students, police, church members, [and] members from the community” (C. Hoff, personal communication, December 2020). However, it is perhaps worth noting that the forum was held during the working week, on a Thursday, which may have reduced the potential for representation from the private sector (though perhaps not dramatically, given the economic implications of the novel coronavirus pandemic). This review contributes new insights.

Disability

As mentioned, the category with the highest number of signals was disability. It is perhaps worth pointing out that the Our Cook Islands Legacy Agenda 2020+ Forum was held on 3 December, which since 1992 has been the United Nations’ International Day of Disabled Persons. This fact was promoted in press releases announcing the forum.

Some signals in this category point to a lack of educators trained to work with neurodivergent or differently abled people. Others highlight a need for support groups for caregivers. These signals reflect a growing awareness of disability in the Cook Islands; more research is required to understand whether this correlates with an increase in prevalence, diagnosis, education, or all three.

A connection could perhaps be drawn between signals associated with disability and signals related to technology, which this report will also discuss. A paper published by Noel &

Ellison (2020) draws the data-based conclusion that “people with disabilities, especially younger adults who will continue to experience years of healthcare needs, see the value in telehealth services”. A separate literature review (Zhou 2019) suggests caregivers for people with disabilities find digital interventions helpful also.

Mental Health

Mental health is another theme that appeared frequently during this review. Multiple signals point to a gap in services for mental health, including a lack of skilled counsellors. Others suggest a need for support groups centred on such challenges as addiction, teen parenting, caring for the elderly, caring for people with dementia, and undergoing menopause.

The National Sustainable Development Plan 2016-2020 lists youth wellbeing as trending downward, and identifies suicide and suicide ideation as indicators. It also identifies an increase in “mental health disorder cases” diagnosed by the Ministry of Health, and alludes to the large number of undiagnosed and untreated mental illnesses in the Cook Islands population. Weak signals located during this review suggest a need for a much broader approach to mental health, which considers people of all ages and all genders confronting all manner of mental health issues.

A signal suggesting a need for male-specific services is perhaps worth discussing, given the research that shows men are far less likely to seek help for issues related to mental health. A survey commissioned by the British Mental Health Foundation (2016) found that men are also less likely than women to talk about a mental health problem with their friends and families. It bears mentioning that mental health issues often have society-wide implications. Further study is required to understand the linkages between mental health issues and the overrepresentation of males in prison, recidivism, death by suicide, and violent offences in the Cook Islands.

A connection can be drawn between mental health and signals related to the absence of rehabilitative services and support groups for substance abusers in the Cook Islands. Studies (Smith et al 2017) have established a correlation between mental health issues and substance use. It is worth noting that the National Sustainable Development Plan 2016-2020 mentions alcohol only in relation to vehicle crashes.

Other connections can be drawn between signals in this category and signals in others. For example, a framework for mental health services could consider the philosophical basis of *vairākau* Māori – the idea that the mind, body, and spirit are interconnected. A signal suggesting the need for mentorship programmes could also have applications for mental health.

It is worth noting that access to broadband can expand possibilities in the area of mental healthcare, particularly in remote places. The researcher interviewed six people in the Cook Islands who were previously diagnosed with anxiety and depression in New Zealand and Australia; all videoconference weekly with a qualified therapist and prefer this arrangement to accessing counselling in the Cook Islands, where they worry about their anonymity and the confidentiality of their conversations. All said they find value in teletherapy.

Parenting

Parenting recorded the third-highest number of signals identified during this review. Some signals suggest a need for support groups for new parents. Others indicate a need for

childcare centres, or crèches in workplaces. A signal highlighting a need to encourage a “drive to achieve” can also be considered within the context of parenting.

Most parenting-related signals point to a need for free parenting education. One signal suggests parents should be “equipped”. It is perhaps worth mentioning the impact that ill-equipped parenting can have on a society. A groundbreaking study conducted in the 1990s, known as the ACEs study, found that adverse childhood experiences such as abuse and a dysfunctional home environment are strongly related to such outcomes as poor physical health, poor mental health, addiction, abuse, and crime (Feletti et al 1998). One signal located during this review is a nod to these webs of connections; it states “underemployed parents => children living in poverty => violence & neglect”. This is a view that intersects social science, economics, and justice. A connection can also be made between signals related to parenting and a signal pointing out the lack of data related to the 0-3 years age group in the Cook Islands. Further research is required to understand the developmental impacts of adverse childhood experiences on babies and children in the Cook Islands.

Technology

The National Sustainable Development Plan 2016-2020 identifies broadband penetration as a goal, but does not consider specific ways in which increased access to the internet expands possibilities in the areas of health, education, the economy, and even culture.

One signal identified during this review suggests “tech curriculum at high school”, indicating an awareness of the potential of the internet to broaden economic opportunities. Another signal states, “Remember we are player of [sic] international stage!” This could be interpreted as a nod to the capacity of technology to connect Cook Islands workers to global markets. Another signal suggests a Māori language app for kids, which highlights the innovation that becomes possible at intersections, in this case at the intersection of technology, education, and culture.

The global coronavirus pandemic has highlighted the potential of technology to transform the way we engage with the global economy. People all over the world, including in the Cook Islands, have had to adapt to working from home, using video and collaborative technologies. The normalisation of working from home could be considered in relation to signals suggesting offices should have childcare centres.

It is worth pointing out the broad web of connections between technology and other categories identified during this review. For example, technology could facilitate a healthcare hub for the northern group, a support group for women struggling with postnatal depression, and workshops for busy parents.

Agriculture

Signals related to agriculture are best understood within the context of the global coronavirus pandemic, which revealed the tenuousness of relying on imports and transnational transportation for food security. This review located signals that suggest a need for home gardens, planting education, and for each of the country’s islands to be self-sufficient. Signals pointing to a need for organic planting programmes reflect a growing awareness of the negative health impacts of chemical fertilisers and pesticides.

Misc.

Other commonly appearing signals pertain to career development for young people and an evolving culture of entrepreneurship. Some signals suggest a business incubator; others point to a need for internships in disciplines outside the trades. Some signals seem to suggest a need to increase productivity; one relates to incentivised pay scales.

Other signals point to a need for a rest home for the elderly and financial support for their caregivers. These signals reveal the tension between modernity and traditional culture, which emphasises caring for elderly people and intergenerational living.

Other weak signals include a suggestion that housing rent and land lease values should be regulated, a vote for gender equality in Parliament and island government, a suggestion to integrate all Māori dialects into educational curricula, and a desire to see laws reflect the “Word of God”, specifically the value of inclusivity.

VII. Conclusion

Two of the most significant events to occur this year are COVID-19 and the installation of a fibre-optic cable. The first event resulted in the effective cessation of tourism and accelerated a public dialogue about economic diversification. The second event, coupled with a new law that removes the monopoly on telecommunications, seems to have heightened awareness of opportunities in the digital economy. It is interesting, then, that most of the signals yielded during this review pertained to gaps in social services.

While a more rigorous methodology may have yielded different results, scanning allowed a flexibility necessary for mapping connections and contextualising ideas. Further work in mapping connections between signals that emerged during this review could bolster planning efforts related to the National Sustainable Development Agenda 2020+.

VIII. Recommendations

- Outliers should be considered and not dismissed, given the historical evidence that they are often valuable indicators of shifts;
- The social bent of the signals identified during this review should be integrated into the larger body of research informing the National Sustainable Development Agenda 2020+; and
- Further work is required to understand the connections between signals identified in this review and others.

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X. Appendix

Weak Signals Recording Template

| Weak Signal | Tag | Comments | Implications |
|---------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------|---------------------------------|
| Gender equality in Parliament and local government | Governance, Social | | |
| “Suggestion of a northern group hub for services e.g. health” | Governance, Social | “So travel to Raro is not necessary (but inter-island travel???)” | |
| Integrate all dialects into education systems | Social, Education, Culture | | |
| Vision of future should be based on liberty/freedom | Social | Freedom of what? | |
| “Laws should be based on WORD OF GOD” | Social, Governance | “Jesus was inclusive” “Value people” | |
| Create a drive to achieve | Social, Economic, Education | | Linkages to parenting |
| Need rehabilitation for addiction | Social | | |
| Need a business incubator | Economic, Education | | See “Cook Islands Business Hub” |
| Internship programmes | Economic, Education | Need internships in disciplines other than the trades | |
| Incentivised pay scales | Economic | | |

| | | | |
|--------------------------------------------------------------------------------------------|------------------|-------------------------------------------|-----------------------------------------------------------------------|
| Need skilled teachers/nurses for children with disabilities | Social | | Connections to tech, telehealth |
| Equip/support parents | Social | | |
| Support for youth who are living with and looking after older caregivers | Social | | |
| Shortage of support/activities for kids that are safe and engaging | Social | | Linkages to crime |
| Mentorships | Social, Economic | | Linkages to parenting and mental health as well as career development |
| Lack of data in the 0-3 years old category | Social | | |
| “Focus on uni. + less on trade vocations” | Education | | |
| “Underemployed parents = children living in poverty = violence & neglect” | Social, Economic | “Create more jobs vs. unemployed benefit” | Recognises connectedness between issues |
| Need qualified educators for disabled children | Social | | |
| Need support groups for postnatal depression / stress from raising child with disabilities | Social | | Linkages to mental health |
| Counselling for people moving back to outer islands | Social | | |

| | | | |
|------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|--------------------------------------------------------------------------|
| Tech curriculum at high school | Economic, Education, Technology | | |
| Need teen / young mum support | Social | | |
| Need more useful internships, not just for cheap labour | Education, Economic | | |
| Need organic planting programmes | Education, Environmental | | Recognition of the health impacts of chemical pesticides and fertilisers |
| Cannot achieve a pristine environment | Environmental | “Setting us up to fail” | |
| Mediation support | Social | | |
| Professional development for healthcare staff to identify early signs of disability in infants | Social, Education | | Connections to tech/telehealth? |
| Support group services for new parents | Social | | |
| Need daycare services for children with disability | Social | | |
| Develop more Māori apps for kids | Education, Culture | | Tech and culture not mutually exclusive |
| Need a facility for elderly people | Social | | Highlights the tension between modernity/economic growth and culture |
| “Remember we are player of international stage!” | Economic, Technology, Education | | Technology broadens economic opportunities to include global markets |
| Well-being in spirit/body = | Social, Education | | Integrating traditional knowledge into health |

| | | | |
|----------------------------------------------------------------------------|------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------|
| vairākau Māori | | | programmes and school curricula |
| Vision has too much culture, not enough economy | Social, Economic | | |
| Need subsidies for reusable diapers and formula milk | Social | | |
| Workplace crèches / childcare centers | Social, Economic | | Could expand labour pool |
| Free educational workshops on parenting | Social, Education | | |
| “Share pamphlets at Rehab nightclub on parenting the parents” | Social, Education | “Parenting the parents?” | |
| Regulate housing rentals | Social, Governance, Economic | | |
| AA is defunct | Social | | Linkages to mental health |
| Need support for accessing scholarships to universities beyond NZ and Fiji | Education | | Connections to tech/online learning? |
| “High tech ELON MUSK” | Technological | | |
| “Allow to play” | Social | | Work-life balance |
| Male specific services | Social | | Further study required to understand the overrepresentation of males in recidivism, prison, and violent offences |
| Raise awareness on mental illness and stigmatisation | Social | | Connections to tech? |

| | | | |
|-----------------------------------------------------------------|------------------------------|-----------------------|-------------------------------------------------------------------------------|
| Support services for women going through menopause | Social | | |
| Need price control on rent and land leases | Social, Governance, Economic | | |
| Meals on wheels in pa enua | Social | What about Rarotonga? | |
| “Develop islands to be self-sufficient in terms of agriculture” | Social, Economic | | Food security Alleviates burden of NCDs |
| Support for dementia needed | Social | | Growing awareness of dementia and a need for resources to support the elderly |
| Need support for people with special needs | Social | | |
| Home gardens – seedlings, community support | Social, Economic | | Food security Alleviates burden of NCDs |
| Need support for parents | Social | | |

Guide for Table Leads at Forum

Thank you very much for your support!

We hope the following will help guide you in these activities.

Through these sessions we aim to seek further feedback and guidance into the draft content developed from over 60 consultations on the NSDA2020+ held since July.

We have two key activities. One is the “**NSDA2020+ Staycation**” – groupwork whereby groups will answer questions to prompt discussions and answers based upon the two brief documents provided.

The second is the “**NSDA2020+ Johnsons Class**” – groupwork in which groups will assess current activities in place to enable to wellbeing of a

Cook Islander within a certain age group, and to identify what is needed within certain age groups for the wellbeing of a Cook Islander.

Please don't print the below – we'll be providing you all with hard copies each of these documents.

Your AWESOME role!

Facilitators (Valery and Dean) will paint the bigger picture and coordinate table lead movement. The wellbeing instructors (Moana Manuela, Dr Evangeline Junior and Partner) will set the scene and you will be responsible for guiding your group to complete the tasks outlined before them.

You, wonderful you:

- will introduce them to the task and help ensure they are in the right frame of mind, whether that be to “hype” them up and build/maintain energy.
- are to ensure clean, tidy tables with fresh butcher paper and marking pens at the start of each group session.
- will provide them with their envelopes that outline instructions and help answer any questions they may have.
- are to help prompt discussion and keep it flowing, channeling opinions, ideas and thoughts to outcomes on paper.
 - are to help them stick to time and on that note, you are to keep an eye on the time.
 - are to empower their ideas, allowing them to be innovative and creative, or as conservative as they believe.

Once time is up, you will be responsible for rolling butcher paper answers and closing with a rubber band, then packing everything up and moving to the next table.

Please note – “runners” will be collecting butcher paper from you to hand to the typists. **We're going to provide you with:**

- A bulk of butcher paper and marking pens
- Placards that state *NSDA2020+ Staycation Landlord* and *NSDA2020+ Personal Trainer*.
- Lollies to rejuvenate your team
- Envelopes with instructions for the different sessions – these will be labelled
- Overall annotated agenda
- Note prompts specifically for your table lead roles
- Diagram of venue with table numbers

Our logistics team:

Table leads

| # | Turanga group | Meimeitaki group |
|---|-----------------|------------------|
| 1 | Fletcher Melvin | Ewan Cameron |
| 2 | Liana Scott | Ben Tavai |

| | | |
|----------|--------------------|---------------------|
| 3 | Eve Hayden | John Herman |
| 4 | Rima Moeka'a | Ana File |
| 5 | Taniera Fisher | Tony Fe'ao |
| 6 | Stephanie Vaiimene | Melina Tuiravakai |
| 7 | Dorothy Solomona | Aporo Kirikava |
| 8 | Tepaeru Tauraki | Maevarangi Kirikava |
| 9 | Teuru Passfield | Apui Tumutoa |

Typists responsible for typing notes on butcher paper at front table

1. Taupepa Tupa
2. Isaac Ryan-Glassie E
3. Eva Parker
4. Tunoa Araitu

Logistics coordinator

Charlene Hoff

Logistics support

1. Exceive Papa
2. Uri Kamana

Annex 1: Note prompts specifically for your table lead roles

Note – the following is a guide for you to follow – you don't need to guide word for word. • You will move groups, as opposed to the groups moving tables.

- You will take your box of goodies with you each time you move.
- For the NSDA2020+ Johnsons session – you will move three times, with the same age group.

| | | | |
|----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.30am (30 mins) | Staycation NSDA2020+ style | <p>Staycation landlords (table leads): Kia Orana! Welcome to your very own 30-minute staycation with your fellow NSDA2020+ builders. To build your well-being, this activity sets the foundation for our legacy in a mindful and relaxing way. For this staycation we have the three briefs to guide you, they were based upon our NSDA2020+ consultations 1. The Cook Islands Vision of Wellbeing 2. Our Values: The Eternity of Kia Orana Please read or refer to them to help you with this session. Let your good ideas flow! If you have any questions, just ask your “Staycation Landlord” Enjoy your stay with us!</p> <p>Hand them the sealed envelopes, examples of contents are attached.</p> | <p>Butcher paper Instructions in packs Marking pens ready on table Envelopes read to share. Facilitators to float Staycation landlord to tidy up space, put butcher sheet aside and prep new space and paper etc and new envelope.</p> <p>Runners to collect butcher paper.</p> <p>Countdown timer to be on screen – TBC</p> <p>Once time is up Facilitators Val and Dean will end the session and you’ll need to move to the next group.</p> |
|----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | | | |
|----------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 11.10am (45 mins) | NSDA2020+ Johnsons Class! | <p>Personal Instructors (table leads to rotate 3 times) Are you ready for 45 minutes of awesomeness? We’ve stimulated our mind and now we’re getting physical with our very own NSDA2020+ Johnsons Class! So, brace yourselves - we have some movement planned ahead! The Cook Islands NSDA2020+ has a 100-year vision which we aim to achieve. To do so, and while ensuring we remain with the changing times, we will be guided by 25 year-frameworks on this journey and these will be monitored against 5-year plans.</p> | <p>Placards to be changed.</p> <p>Have upbeat, fast music playing.</p> <p>Facilitators to manage time.</p> |
|----------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|

| | | |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>This activity will help ensure we do all we can throughout the lifecycle of a Cook Islander, to help achieve our vision of wellbeing in a systematic way.</p> <p>We have nine workstations in all for our NSDA2020+ Johnsons Class. At each station there is a profile of a Cook Islander in that age bracket.</p> <p>You will have the opportunity to spend 15 minutes (each round) in only three of the age groups. Then the lead will move table and start the next group with your envelope and age group (different from the one they just did)</p> <p>[These don't need to read the below – it's up to you - These are:</p> <ol style="list-style-type: none"> 1. Bearcrawl NSDA2020+ - From Birth through the first 1,000 days 2. Push gorilla NSDA2020+ - 3 – 5 years 3. Commandos NSDA2020+ - 5 – 12 years 4. Burpees NSDA2020+ - 12 – 15 years 5. Froggies NSDA2020+ - 16 – 17 years 6. Squat jumps NSDA2020+ - 18 – 25 years 7. V Snaps NSDA2020+ - 26 – 40 years 8. Static Gorilla NSDA2020+ - 41 – 60 years 9. Push offs NSDA2020+ - 60 plus years] <p>Timing: You will be told when you have two minutes left and then the table leads will move tables and start fresh with each group.</p> <p>Hand them the sealed envelopes, examples of contents are attached.</p> <p>Facilitators (Val and Dean)</p> <ul style="list-style-type: none"> • When the full time is up, everyone is to stretch with the table leads to move over again to the left and start again. | <p>Facilitators to have a whistle.</p> <p>Prep written instructions for sharing.</p> <p>Sign on the timing clearly placed on the table.</p> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|

Annex 2: Examples of contents within the envelopes that will be shared with each group Activity 1. NSDA2020+ Staycation

Welcome to your NSDA2020+ Staycation! Where you will be staying with us for 30 glorious minutes! In this envelope we have several copies of two documents:

1. The Cook Islands NSDA2020+ Vision of Wellbeing
2. Our Values: The Eternity of Kia Orana

We ask that you select a scribe and discuss the following questions for your scribe to document answers on butcher paper provided.

If you have any queries – please don't hesitate to ask your NSDA2020+ Staycation Landlord

- a) What do you feel is lacking in the current proposed vision?
- b) Do you feel the vision should be changed, if so what do you propose?
- c) What would you like to add to our Values: The Eternity of Kia Orana?

d) Please prioritise the values in the Eternity of Kia Orana from most to least, of value. Meitaki ma'ata!

The Cook Islands NSDA2020+ draft Vision of Wellbeing

"An empowered, proud and innovative people with the highest quality of wellbeing in life which is consistent with our aspirations, and is in harmony with our vibrant living language, our rich historical and cultural heritage and pristine environment"

The Eternity of Kia Orana

Kia Orana is the unity of the heart, the mind and the soul: within each one of us. It is the act of humility Positively reaching out to others. It encapsulates our shared Values as a Nation.

Kia Orana is the essence of our people and islands. The Kia Orana values embody this essence and reflects our aspirations as a Nation. Our people, family from outside who make this their home and visitors will learn and come to appreciate our values and share these experiences with the world.

Kite Pakari - wisdom of the ages
Irinaki – Faith in oneself and others
Akakoromaki and Akatapu – Patience and Respect

Ora - life
Rota'ianga-unity as a people and Nation
'Aka'aka - Humility
Noa - Freedom
Aro'a and Meitaki - Love, kindness and thankfulness

All of these are expressed for eternity in the one phrase: KIA ORANA. Show your mana say Kia Orana! In line with our Kia Orana values we will strive to ensure:

- Our Dignity: Everyone has enough to live in comfort, safety and happiness
- Our Nature: A restored and safe natural world for all life
- Our Connection: A sense of belonging and institutions that serve the common good
- Our Fairness: Justice in all its dimensions at the heart of economic systems, and the gap between the richest and poorest greatly reduced
- Our Participation: Citizens are actively engaged in their communities and locally rooted economies

Activity 2. NSDA2020+ Johnsons Class

Welcome to your NSDA2020+ Johnsons Class! Where you will be exercising your brain with us for 15 glorious minutes!

In this envelope we have a profiles of the age group. We ask that you select a scribe and discuss the following questions for your scribe to document answers on butcher paper provided. Please note your answers can be as wide and as far as you believe.

If you have any queries – please don't hesitate to ask your NSDA2020+ Staycation Landlord

1. Select your scribe and please read through your profiles.

2. What activities, policies or legislation do you know of, which helps to enable the wellbeing of a Cook Islander within this age group?
3. Please list any solutions for gaps that you think we need to fill to help enable the wellbeing of a Cook Islander within this age group?
4. For each of the activities, policies or legislation etc either in place or proposed – who do you think should be the agency/ies, group/s, NGO/s, government department/s that should coordinate these?

Meitaki Ma'ata!

Annex 3 Annotated Agenda Part two for facilitators, team leads, wellness/happiness/fitness instructors

| Time | Section | Details for facilitators, instructors, team leads | Notes |
|----------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.20am (10 mins) | Facilitation walk through | <p>Facilitators (Val and Dean) To building on the scene - this is a wellbeing journey – we're continuing our half day journey to touch on the spiritual, physical, emotional, intellectual and social. Introduce wellness instructor.</p> <p>Wellness instructors (Moana and Evangeline)</p> <ul style="list-style-type: none"> • Paint picture of our need for calm and mindfulness and the need for a staycation • Take deep breaths – do some form of breathing technique • Do an activity whereby the thoughts and worries of your day are removed • Do an activity on the taking off the hat (professional, etc etc) and be you and input based on all your experiences – all of your experiences and not just one hat – all hats and experiences <p>Facilitators (Val and Dean) Get people in the mood:</p> <ul style="list-style-type: none"> • Turn to the left and say Kia Orana! to your staycation mate • Now turn to right and say Turou! to your other staycation mate • Close your eyes and take three deep breaths • And say out loud - "We can do this" <p>Will leave you with your "Staycation landlord" who will walk you through the</p> | <p>Table leads equipped with their own packet of "goodies"</p> <p>Staycation landlords to put sign up and prep group.</p> <p>Wellness instructor – Moana Manuela and Evangeline Daniela Wong</p> <p>Upbeat facilitators.</p> <p>Confirm way to allocate group number</p> <p>Music to be paid</p> <p>Countdown timer to be on screen.</p> |

| | | | |
|----------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | house rules before you spend time relaxing and having good conversations with each other. | |
| 10.30am (30 mins) | Staycation NSDA2020+ style | <p>Staycation landlords (table leads): Kia Orana! Welcome to your very own 30-minute staycation with your fellow NSDA2020+ builders. To build your well-being, this activity sets the foundation for our legacy in a mindful and relaxing way. For this staycation we we have the three briefs to guide you, they were based upon our NSDA2020+ consultations</p> <ol style="list-style-type: none"> 1. The Cook Islands Vision of Wellbeing 2. Our Values: The Eternity of Kia Orana <p>Please read or refer to them to help you with this session. Let your good ideas flow! If you have any questions, just ask your "Staycation Landlord" Enjoy your stay with us!</p> | <p>Butcher paper Instructions in packs Marking pens ready on table Envelopes read to share. Peaceful music playing over this time.</p> <p>Music to be played</p> <p>Facilitators to float</p> |

| | | | |
|--------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | <p><u>Hand them sealed envelopes – contents will contain:</u> <u>Please elect a scribe and a lead for your “staycation”</u> <u>Now to stimulate your brain we have the below for you to do!</u> a) <u>What do you feel is lacking in the current proposed vision?</u> b) <u>Do you feel the vision should be changed, if so what do you propose?</u> c) <u>What would you like to add to our Values: The Eternity of Kia Orana?</u> d) <u>Please prioritise the values in the Eternity of Kia Orana from most to least, of value.</u></p> <p>Facilitators (Val and Dean)</p> <ul style="list-style-type: none"> • When time is up get everyone to stop, stand up and stretch. • When stretching, the table leads move over to the next group. | <p>Staycation landlord to tidy up space, put butcher sheet aside and prep new space and paper etc and new envelope.</p> <p>Runners to collect butcher paper. Countdown timer to be on screen.</p> |
| 11.00 (10 mins) | Facilitation walk through | <p>Facilitators (Val and Dean)</p> <ul style="list-style-type: none"> • To blow whistle and introduce the Johnsons Class NSDA2020+ Style. • Talk how we’ve done the spiritual, a bit of intellectual and now we’re going to the physical. Introduce the fitness instructor to coordinate. <p>Fitness instructor (Junior and partner)</p> <ul style="list-style-type: none"> • Explain the importance of health with wellbeing • Fitness instructor to do quick 5 mins of warm-ups and exercises on the spot • Hand them over to their “personal trainer” table lead | <p>At this time the “Staycation Landlords” put their “Personal Trainer” placard on and get the space ready – put new butcher paper on table, put profile on table, put sign on table</p> <p>Whistle to be used for this session.</p> <p>Countdown timer to be on screen.</p> |

| | | | |
|----------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.10am (45 mins) | <u>Wellbeing for Life – NSDA2020+ Johnsons Class!</u> | <p>Personal Instructors (table leads will rotate 2 times in this round) Are you ready for 40 minutes of awesomeness?</p> <p>We've stimulated our mind and now we're getting physical with our very own NSDA2020+ Johnsons Class! So, brace yourselves - we have some movement planned ahead!</p> <p>The Cook Islands NSDA2020+ has a 100-year vision which we aim to achieve. To do so, and while ensuring we remain with the changing times, we will be guided by 25 year-frameworks on this journey and these will be monitored against 5-year plans.</p> <p>This activity will help ensure we do all we can throughout the lifecycle of a Cook Islander, to help achieve our vision of wellbeing in a systematic way. We have nine workstations in all for our NSDA2020+ Johnsons Class. At each station there is a profile of a Cook Islander in that age bracket.</p> <p>You are in the xxxx station.</p> | <p>Prepare envelope of instructions to be handed over.</p> <p>Prepare profile and sign</p> <p>Have upbeat, fast music playing. Facilitators to manage time. Facilitators to have a whistle.</p> <p>Prep written instructions for sharing.</p> <p>Sign on the timing clearly placed on the table.</p> |
|----------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | | | |
|-------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| | | <p>Happy Instructors (Aunty Lydia and Aunty Nga)</p> <ul style="list-style-type: none"> • Talk about the importance of being happy • Get everyone to do a physical happy activity • It's time for us to wind our day down with this activity and end on a good note. • We've stimulated our mind we've gotten physical and now we're going to end with some happy thoughts shared by our group. | |
| 12.15 (5 mins) | Wrap and completion | <p>Facilitator (Val)</p> <p>Thank you everyone for participating in the Wellbeing journey for Our Cook Islands Legacy Forum. All content now being collated to be inserted into the draft report.</p> <p>Prayer for kaikai</p> | Very quick closure. |
| 12.20 | Kaikai | | All group leads to collect papers and end |



SCENARIO RESEARCH

Scenario 1: A comfortable income is accessible for all

For the National Sustainable Development Agenda 2020+

Report prepared for the Central Policy and Planning Office, Office of the Prime Minister

Rima Moeka'a

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This report has been prepared for the Government of the Cook Islands and coordinated by Central Policy and Planning Office of the Office of the Prime Minister.

Executive Summary

This report presents the findings of one of the three scenarios that will be utilised to inform the development of the Cook Islands National Sustainable Agenda 2020 (NSDA 2020+)

This research specifically reports on the scenario “**a comfortable income is accessible for all**” scenario.

A scenario sketching method in conjunction with a PESTLE analysis were used to collect data and present findings and analysis for the scenario. The goal of using these methods is to reveal the dynamics of change and use insights to reach sustainable solutions. The possible scenario snapshots are divided into two scenario pathways: 1) “an ambitious yet expensive pathway to reach a transformative goal; and 2) a moderate or conservative and affordable pathway to reach a moderate or conservative goal” (OPM, 2021, p4).

The ambitious pathway includes:

- The Pa Enua living and working conditions are similar to Rarotonga;
- Employees are empowered and can negotiate flexible work days and hours with a suitable income;
- Education and innovation will be the main industries;
- The development and implementation of a formalized Cook Islands Education Curriculum;
- Cook Islanders remain in power.

The moderate pathway includes the above and suggests realistic and affordable ways to reach the transformative goal. This includes political backing and a coordinated approach by all.

Further discussions including a diversified economy, linkages between an affluent population and health and recommendations for both pathways are also deliberated and explored.

Acronyms

ANZ Australia and New Zealand Bank Limited

BCI Bank of the Cook Islands Limited

BSP Bank of the South Pacific Limited

CPPO Central Policy and Planning Office

LGBTQIA Lesbian, Gay, Bi-sexual, Transgender, Queer, Intersex, Asexual

NSDA 2020+ National Sustainable Development Agenda 2020+

NSDP National Sustainable Development Plan

OPM Office of the Prime Minister

1. Introduction

This scenario research presents findings to inform the National Sustainable Development Agenda 2020+. This report specifically covers the “comfortable income is accessible for all” scenario.

1.1 About the National Sustainable Development Agenda 2020+ (NSDA 2020+)

The Central Policy and Planning Division (CPPO) within the Office of the Prime Minister (OPM) is developing the National Sustainable Development Agenda 2020+. The NSDA 2020+ replaces the NSDP 2016-2020 (Government of the Cook Islands, 2016).

The Agenda is a new sustainable development direction for the Cook Islands. This will include a 100+ year roadmap and is a living framework that will guide the Cook Islands through a “well-being for life” approach (OPM 2021, p.4). The plan also contains four 25 year time horizons signaling a shift towards government long term planning and forecasting approaches.

The NSDA 2020+ requires sound research to inform the new strategy plan CPPO have completed the first phase of research where emerging issues were identified and integrated into the new agenda using the scanning method.

1.2 Scenario Research Report

This report provides an overview, outcomes and exploration from a scenario research/analysis approach towards the development of the Agenda.

The NSDA 2020+ consultation and scanning method process identified three scenarios to analyse. These are;

1. A comfortable population- an educated and knowledgeable populace, with access to a comfortable income, home ownership and safe communities- specifically “a comfortable income is accessible for all”
2. A healthy population-maintaining a state of physical and psychological well-being, where body, mind and spirit are in balance- specifically “the Cook Islands has the healthiest population in the world”
3. A happy population- a vibrant community living in a pristine natural environment, where language, culture and spirituality is thriving- specifically “the Cook Islands is well prepared for climate change and its effects”

This report exhibits the first scenario “a comfortable income is accessible for all”.

1.3 Structure of the Cook Island Economy

The Economic Development Strategy 2030 (EDS 2030) envisions an integrated approach by all to build a dynamic, prosperous and inclusive economic future for the Cook Islands that is of course in harmony with the Cook Islands culture and the surrounding natural environment. Additionally the focus be “quality over quantity” approach (CIG, 2021).

The economy has been growing steadily since the economic reform period in the late 1990s. There was a brief recession during 2007 and 2008 but economic development has occurred (Government of the Cook Islands, 2019).

The Cook Islands graduated to a high income status country in January 2020 and is the first Pacific country to achieve this. This came about because the Cook Islands GNI per capita is well above the threshold set by the OECD therefore signaling that the economy is capable for financial independence and is self-sustainable (MFEM website)

The Cook Islands economy is determined by the following economic factors; GDP, inflation, consumer price index, merchandise trade, building approvals and domestic banking sectors, tourism. The Cook Islands economic growth is heavily reliant on exports of services in particular from New Zealand and Australia (CIG, 2021). The Cook Islands financial landscape comprise of domestic and international banks, a superannuation fund, insurers, trustee companies and money changing and remittance businesses. There are three banks in the Cook Islands; ANZ and BSP both foreign owned banks and BCI which is owned by the government. All have access to a bank account (Bannister & Nakatani, 2020).

There are four industries that play a key role in the structure of the Cook Islands economy. These are tourism- the primary industry, construction, agriculture, forestry and fishing- mainly in the Pa Enua and the international financial services (CIG, 2021). The Cook Islands has also looked to possibly diversify its sources of economic development through developing the sea mineral industry and technology and innovation which could provide a boost to income in the long-term (Bannister & Nakatani, 2020).

Prior to Covid 19, The Cook Islands economy was performing at its potential. The Cook Islands Gross Domestic product (GDP) has increased more than 40 percent from 2011 with \$375 million to \$531 million in 2018/2019 before the impact of Covid-19 (CIG, 2021)

1.4 Impact of COVID-19

The current COVID-19 pandemic has had a huge impact on the economy of the Cook Islands. The borders closed in March 2020 cutting the flow of tourism- the driving industry (CIG, 2021). However from the 17th May 2021, the Cook Islands and New Zealand two-way quarantine-travel free commenced and has seen 12 Air New Zealand

flights in a week from (CIG, 2021). The Cook Islands economy has begun recovering as evidenced by the renewal of tourism activity.

Additionally the pandemic presented economic limits for the country. These are cost of living pressures, labour shortages, infrastructure gaps, limited health services and land limits.

To alleviate these challenges and ensure that the livelihoods of the people in the Cook Islands were looked after, the Government of the Cook Islands implemented the COVID-19 Economic Response Plan by working with development partners without putting the economic future of the Cook Islands at risk (CIG, 2021).

2. Methodology

Scenario Research/analysis is a research approach to highlight central elements of a possible future and draw attention to the key factors that will drive these future developments. Scenario are hypothetical constructs that generate information and knowledge about the present and future and to identify the limits of this information (Kosow & Gabner 2008). Furthermore, Kosow and Gaber (2008) add that scenario research/analysis can be used as a public communication tool to draw attention to issues, provide potential effective policy development and more so help identify ways to increase economic growth.

Researcher objectives included preparing pathways for scenarios identified. One pathway was described as an ambitious approach- an ambitious yet expensive pathway to reach a target or transformative goal. The second pathway is a moderate approach that is a conservative and affordable method to reach a conservative goal.

To meet the objectives above, a half day scenario building workshop in June 2021 was organised. CPPO invited experts for the specific scenarios. Three individuals were part of the scenario 1 discussion. Researchers and experts were guided by PESTLE Analysis and general guiding questions (see below) The PESTLE framework is used to analyse key factors and consists of the following aspects political, economic, social, technology, legal and environment (OPM, 2021). This involves analysing constraints, enablers and prioritising actions and resourcing needs. Each group provided possible snapshots for each pathway and provided feedback at the end of the workshop.

General guiding discussion questions specific to scenario 1 were

1. What do we mean by 'a comfortable income is accessible for all'?
2. What is livable income vs comfortable income? (What is disposable income?)
3. Ambitious/ideal vision - 2050?
4. Moderate vision - 2050?
5. What are the most pressing constraints for accessibility of comfortable income for Cook Islanders?
6. What do we mean by "diversifying our economy"? and how can we achieve th
7. What are some ambitious/expensive ways we might achieve this scenario?
8. What are the political, economic, social, technological, legal, environmental, and cultural factors that might stand in the way of this?
9. What are some moderate/less expensive ways we might achieve this scenario?
10. What are the political, economic, social, technological, legal, environmental, and cultural factors that might stand in the way of this?
11. How big is the income gap between Pa Enua and Rarotonga?
12. Why is there a gap between high income and low income earners?
If it is a problem, is it just a matter of numbers or is it a social, economic or cultural problem?

13. Does the economy of the Cook Islands provide enough attractive opportunities for youth?
14. What actions should the government take?
15. What policies would attract Cook Islanders overseas to return to the Cook Islands or specifically to the Pa Enua?
16. How big a problem is the changing population composition of the Cook Islands including Rarotonga? taking into account, -our diaspora. Are the problems economic, social or cultural?

Following the workshop. Researchers collated discussion notes and presented a draft report/comments to experts/CPPO for comments before a finalized draft was completed.

4. Research Limitations

This report research encountered several limitations.

Due to time constraints, the scenario research report was completed in a rushed matter because of pressing timelines to inform the Agenda's consultations and deadlines.

The timing and scope for workshop and collating qualitative data for the report proved to be an issue too. The qualitative research depends on first hand interviews, focus groups and participant engagement. However the half day workshop limited participant's numbers and there was little time to capture information and discussions. It was difficult to engage in depth discussions especially around the socio-economic ambition and snapshot of the Cook Islands. This meant that some of the information may have been missed during this process and not included in the report.

5. Ethics

There are no ethical errors for the purpose of the scenario analysis. Participants acknowledge contribution in the workshop

6. Findings and Discussion

During the half day workshop with the experts it was important to dissect the scenario. What does “comfortable income” mean and what does “accessible income for all in 2050” look like while also considering the two pathways

The experts deliberated and decided that when referring to “all” that this includes youth, women, men, the LGBTI community, the elderly and persons with disabilities.

“All” should have access if eligible to income.

There is a difference between comfortable income and livable income.

- livable income: meets adequate needs without disposable income to expend on luxury items/services; and
- comfortable income: income that meets needs plus disposable income to expend on other luxury items/services.

Experts noted that comfortable income is also relative to the context and environment for example, in the Pa Enua-the flow of income can be semi-subsistence (working on land to provide food for the family) and physical income from “service” to expend on other basic needs.

Experts also added that the country must factor in the nature of work, hours, days, environment and accessibility when we referring to the term “comfortable”. For example low income earners versus high income earners. Low income earners are working possibly 2 to 3 “service”/semi subsistence jobs, longer hours just to meet basic needs and to possibly have disposable income. In 2019, Low income earners in the Cook Islands were earning just above \$13, 000 per year (CIG, 2021). High income earners on the other may work less hours that are more flexible and that may not be labour intensive too.

To note, in 2018, 8% of the population was estimated to be earning less than the minimum livable annual income of about \$20,845. Particularly the Pa Enua Gini coefficient was estimated at 0.386 in 2016 compared to Rarotonga’s 0.329 clearly showing an unequal income trend (CIG, 2021).

By law, the government is required to review the minimum wage annually. In 2018 much of the concern among workers and the general public was that cost of living and provision of livable wage particularly in the Pa Enua. Also the option of having different minimum wages for Pa Enua and Rarotonga especially with the high living costs in the Pa Enua. This is not feasible for the government therefore setting a universal minimum rate for all. Historically, the minimum wage from 1987 was \$2.58 and increased in 2000 to \$4. In 2006 it increased by 20% to \$6, in 2015/2016 \$6.25 and in 2017 to \$7.25. In 2020, triggered by the pandemic, the minimum wage for the Cook Islands increased from \$7.60 to \$8.00 per hour (CIG, 2018). Additionally, real median income increased in

2019 to \$23, 363 per person (CIG, 2021). Though this figure only applies to those whom are being paid at the minimum wage or just above. There are also discrepancies of income for low level and high level employments. Experts also added that most high level positions with possible high income are held by non-Cook Islanders. The following describes two pathways to achieve “a comfortable income is accessible for all” scenario.

6.1 An Ambitious pathway

An ambitious snapshot for the scenario is that the Pa Enua will be more developed or are at a similar level of living as Rarotonga. The basic cost of living in the Pa Enua is higher than Rarotonga. On average Rarotonga residents spend 32% less (\$3250) than those in the Pa Enua on basic necessities. The Pa Enua also faces infrastructure and transportation deficits. The lack of reliable shipping and flights costs also add to the higher cost of living and frustration in the Pa Enua (CIG, 2021). As highlighted in the pre-text, the Pa Enua concerns are particular around cost of living and low wages. Social media also adds to the lifestyle and societal differences and the desire to “keep up with the Joneses”. This is a societal benchmark and accumulation of material goods and being below this is perceived as being socioeconomically and culturally inferior. According to Akram and Kumar (2017), social media though innovative and providing a platform to share- it also has a negative effect on education, health, society, business, and youth. Social media introduces false social and economic aspirations and entices society to “want” more luxury items and lifestyle when one cannot afford it. Alternatively, there is a **generational gap**. The aging population of the Pa Enua particularly are suffice with the “simple life” compared to the younger generation who would like changes in wages, employment and services.

Better transportation services and infrastructure projects will benefit the Pa Enua. This will provide a more content and suitable working environment and livelihood. Part of the government’s policy is to adjust government salaries to reflect an increase in the cost of living in Rarotonga and the Pa Enua, and to also provide incentives for highly skilled Cook Islanders to return to the islands (Bannister & Nakatani, 2020). Experts noted that the socio-economic factor, particularly economic stability is the main deterrent for returning Cook Islanders. Human capital is most important in ones country to drive economic development and enhance well- being. This snapshot emphasizes that the economy should serve society and not people adjusting to the economy. By moving towards the “economy serving the people” approach could incentivize Cook Islanders to return. This ambitious pathway presents a more equivalent and comfortable level of income and lifestyle suitable for “all”.

To add to the above pathway, the **Pa Enua are self-sustainable and are independent**. The Pa Enua will move away from relying on Rarotonga services, links and resources. This will mean that governance will change on each island whether it be individually, or grouped into Te Pae Tokerau, Te Pae Tonga and Rarotonga. This pathway exudes several significant issues like the ownership of the EEZ, divisions between islands and society, disconnection of communities. This pathway may not be convincing.

On this ambitious pathway all in the Cook Islands will have **access to jobs/occupations in an environments and context and access income suitable to their level of experience and education (vocational, trades, tertiary). Employees**

will be empowered in 2050 and will have the **flexibility to decide on days and hours to work**. This is where the output of work- whatever it may be-is favoured over “clocking in time”. Studies shows that there is a positive association between job satisfaction and a safe environment. Workers are more committed if they are provided safe policies and will have positive perceptions of the organisations/agencies or their employer (Geyke, 2005). Additionally this will **create an increased skilled, effective, efficient and happy labour force** for the Cook Islands. **Employees are comfortable and are enabled to make decisions**. More time will be available for all families to tend to home/house duties, community services and tending to land/plantation. Cook Islanders living abroad will feel encouraged to return home.

For argument purposes, the EDS 2030, emphasizes “quality over quantity” however there are several gaps. This includes quantitative and qualitative mismatch. The quantitative mismatch is where there are not enough people educated and trained at certain levels or they leave to countries where they can earn higher wages. The qualitative skills mismatch is where employers do not find graduates employable even when they have the right qualifications on paper. This gap will need to be addressed to ensure an increased effective labour force.

On this pathway, the Cook Islands will have a **diversified economy**. The Cook Islands will have a **technology and innovation economy**. The **digital transformation** in the Cook Islands will also provide further service export opportunities. A Digital transformations hub will be a good start to influence this change. The Cook Islands will be **marketing/exporting intangible** products for example education, research and training and creating innovative services. The Cook Islands would have invested exceedingly in **telecommunications** that will provide high caliber reliable internet services, **infrastructure** to cater to the changing environment without destroying the land. Currently, the Cook Islands is investing in essential infrastructure, including an undersea cable that will improve telecommunications capacity significantly, and large water and sanitation projects (CIG, 2021). This will assist in the **export of tertiary education services**, which is a potential source of economic growth and has proven to be a major income earner for other countries (CIG, 2020). Experts mentioned a particular example to support this pathway. If possible, to set up a Marine School/Center to attract researchers/academics and students with clear instructions and obligations. “All” will also be assimilated in the Cook Islands way of living and culture whilst studying. The challenge however would be the governance and infrastructure constraints and resolving this to keep the economy on track and that no opportunities are lost.

Experts added in regards to technology, telecommunications and innovative economy and another example of economic diversification, is **creating images/photos online and selling them overseas**. Bukts and Heeks (2017) state that the **digital economy** is growing fast, especially in smaller countries. More so, Cook Islanders will be able to “work from home” with the improved services. This does not require strenuous

labor/effort but **investment, accessibility and functionality to better sustainable infrastructure.**

On this ambitious pathway the **Cook Islands Maori language, culture and history will be compulsory in all schools and taught up to tertiary level.** Experts expressed that our culture, language and history is our business, we are the custodians. It is the country's' greatest asset and there is great need to ensure that it is thriving in 2050. Education is an effective tool in ensuring that this pathway is met. The CIG will ensure that the curriculum will include the above. The **Ministry of Education will explore and build relationships with relevant stakeholders and NGOS** to assist to solidify and continuous teaching cultural skills, history teaching and papa'anga links. By providing and developing these services, in turn creating a confident, effective and knowledgeable society. This will assist in connecting back to the land and sea. Also, creating a space and environment for re-learning genealogies- an important aspect of Pacific culture. This will provide the CI people a sense of pride and belonging. Increased education and awareness will be given to papa'anga and Akono'anga Maori, ensuring **Cook Islanders remain the landowners.** This of course, being the most important commodity.

On this pathway, **Cook Islanders have remained in power/parliament. Governance** includes better **informed people and is stable.** The **Cook Islands acts, laws and policies will be reviewed efficiently** to ensure safe livelihoods. The Cook Islands current total population according to projections based on the latest UN Data is 17565 (United Nations, 2021) It is evitable that the Cook Islands is and will be made up of different ethnicities/culture. This will mean that there will be mutual to respect between all cultures/peoples and everyone will live in a harmonious environment.

6.2 A moderate pathway

The ambitious pathways has set the standard for the “a comfortable income is accessible to all” scenario. The moderate pathway includes the possible snapshots above but looks at more realistic, sufficient, conservative and affordable ways to achieve the transformative goal.

The main discussions and feedback that came out of the expert workshop was that “all” should have access to “comfortable livelihoods”. This means that all should have the **access to high level opportunities if eligible and suitable income for all levels of labor to suit/compensate for the nature/context of work**. For example, **formalizing a house wife income**. It is also important to **instill confidence and empowerment** back into society to **access job opportunities or build/enhance livelihoods**.

The moderate pathway needs **political backing** and a **coordinated approach** by all involved.

7. Further Discussions

7.1 Linkages between an affluent population and healthy population correlation

The link between an affluent population and healthy population is especially relative to the fourth pathway where “all will have access to jobs/occupations in an environment, context and access income suitable to their level of experience and education. Employees will be empowered and will have the flexibility to decide on days and hours to work. Additionally creating an increased skilled, effective, efficient and happy labour force. Employees are comfortable and are enabled to make decisions”. This explicitly describes a “picture-perfect” affluent population. On the other hand, a nation’s standard of health plays a significant part in the productivity and comfortability of one’s population. Studies have shown and found that people with more health risk factors equated to an increased loss of productivity. The Cook Islands has a high level of Non-Communicable diseases (NCDs). NCDs include heart disease, cancer, stroke, diabetes and are responsible for almost 70% of all deaths world-wide. Eighty two percent of the 16 million world-wide population who die prematurely from NCDs occur in low and middle income countries (WHO website). In the Cook Islands, 64% of the population over the age of 15 are obese or severely obese and this is a contributing factor to diabetes and cardiovascular illnesses. Therefore highlighting that the high figures in the Cook Islands need to be seriously addressed as it impacts on the quality of life. If income aspiration levels are met, this will only contribute to a rich and wealthy population but may mean that the quality of life will not be the same. This would mean the health of one’s population (productivity, happiness) could deteriorate because of having a great deal of money/wealth. Additionally this will also impact the economic sustainability of the Cook Islands.

7.2 An educated population and career pathways

The population of the Cook Islands is a key driver of the Cook Islands economy, especially for demand for goods and services. Therefore, population issues like depopulation need to be addressed to ensure that economic activity remains the same. Of course economic activity cannot occur without an educated, efficient and effective labour force.

In 2016, a quarter of the Cook Islands population had tertiary or vocational qualifications. However as mentioned in the ambitious pathway chapter, that there is a qualitative and quantitative mismatch for the Cook Islands labour force. The qualitative element needs to be considered especially for the future workforce. Employment of graduates who have the qualifications however lack in certain skill to succeed in a higher role, therefore impacting on economic productivity (CIG, 2021).

The primary and secondary education is suffice in the Cook Islands. However there needs to be more urgency for government to strengthen career pathways to support the education system and to compliment the qualitative and quantitative mismatch. Anecdotal evidence suggests there is little to no support in career pathways or an environment to excel to a higher role. To add many Cook Islands students move abroad to undertake tertiary studies and remain overseas, gaining valuable skills in the process. Furthermore have outstanding student loans and returning student's ability to repay loan due to lower salaries in the Cook Islands is an issue. Especially when trying to attract skilled Cook Island graduates to increase the countries skill base (CIG, 2021). This will definitely fill in the skill gap in the labour force if there are supportive services.

Furthermore, women play a vital role in the workforce and economy. The 2019 labour force survey shows that females make up 51.5% of service workers. It can be said that the impact of this, is the time allocated to childbearing and has meant less natural births. More so women are encouraged to leave the labour force after giving birth. To emphasise, if there are more supportive career pathways and services for women this will ensure a comfortable way of living more so economic activity remains the same.

A big aspect of all of this should be the encompassing Policy around Reo Maori and Akonoanga Maori for a proud and resilient people who have a very strong identity. A strong people means a strong and confident Nation.

7.3 Diversification of the Cook Islands Economy

Tourism is driving the Cook Islands economy and this is unlikely to change over the next 5 to 10 years.

Experts expressed that the digital (technology) and innovative economy is the way of the future for the Cook Islands. The Cook Islands economy requires an integrated approach across all sectors to capture the benefits of innovation. A diversified economy would mean investing in the research, education and development (infrastructure) and commitment of new products (CIG, 2021). More so there needs to be continuous effective and efficient competition to ensure incentives for productivity/innovation. As such, the structure of an economy plays a significant role in the level of productivity of a country. To add, technology reinforces productivity, competitiveness and profitability for economies. In the EDS 2030 an example of diversifying is the growth and development of the CI financial services and the adoption of innovative financial services. Another example is investing in creative industries to drive future sustainable economic growth. Thirdly, investing in skilled natural human capital. This contributes to wellbeing indirectly and plays an essential part for the sustained production of goods and services. It also contributes to wellbeing directly as people derive enjoyment from a comfortable environment (Thomas ET. Al, 2000)

There has been a lot of discussion around “a diversified Cook Islands economy” however what that may look like is a bit vague at the moment.

8. Conclusion

As a result, it is important to understand the livelihoods of the Cook Islands. A country's economic development does not only evolve around monetary phases but also the sociological, physical (environment) and rational aspects of society and those around. By better understanding how and why people grow, move and change, we can then apply this information to informing policies, make better decisions but most importantly helping livelihoods, and providing a space for people to live to their full potential.

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Scenario Research for the Cook Islands National Sustainable Development Agenda 2020+

Scenario 2: The Cook Islands is the healthiest population in the world

Report prepared for
Office of the Prime Minister
Central Policy and Planning Office
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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the Office of the Prime Minister. Any errors or misinterpretations are the researcher's own.

Executive Summary

This report summarises and discusses a scenario sketching exercise conducted as part of the planning process underpinning the Cook Islands National Sustainable Development Agenda (NSDA) 2020+. Three scenarios are being considered by the research team, which is being engaged by the Cook Islands Office of the Prime Minister. These scenarios envision the Cook Islands as a country in which everyone has a comfortable income, everyone is healthy, and everyone is prepared for climate change. They are designed to provoke thought about what steps and policy actions are necessary in order to build them. This report considers the second scenario: that by the year 2050, the Cook Islands will have the healthiest population in the world. The research on which the report is based builds two “pathways”, or strategies for achieving the suggested scenario. The first is ambitious, transformative, and expensive; the second, moderate, conservative, and affordable.

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I. Introduction

This report investigates a scenario envisioned by the Office of the Prime Minister's Central Policy and Planning Office as part of a nationwide effort to plan for the next 100 years. It fits into a larger research project, which involves two other researchers analysing the following scenarios: that everyone in the Cook Islands has a comfortable income, and that the Cook Islands is prepared for climate change. The scenario this report analyses, which is that the Cook Islands is the healthiest country in the world, is designed to encourage broad thinking about health in these islands and the many factors which influence it. Keleher and MacDougall (2011) outline some of these factors, known as determinants of health, as follows: individual factors (age, sex, gender, biology); individual lifestyle factors (diet, physical activity, smoking, drinking); social and community factors (neighborhoods, families, schools, churches, discrimination and racism, social exclusion, cultural influences); living and working conditions (education, access to health services, housing, unemployment, air/water quality); and general socioeconomic factors (poverty, cultural and educational opportunities, power and resources). These and other factors are considered in the construction of two "pathways", or strategies for achieving the suggested scenario, which are outlined in this report. The first is ambitious, transformative, and expensive; the second is moderate, conservative, and affordable. Both pathways, and the analysis used to construct them, seek to inform the development of the National Sustainable Development Plan 2020+.

Envisioning a healthy population requires taking stock of the nation's current health profile. Takai'anga Angaanga Tutara a Te Marae Ora, the National Health Strategic Plan 2017-2021, outlines the country's achievements in the area of health, including reaching mortality and morbidity targets, managing waterborne diseases, and improving sanitation. Notably, life expectancy increased from around 40 years in 1945 to about 72 years in 2000, and infant mortality improved from 150 (per 1000 live births) in 1950 to 3.4 in 2002 (Herman 2013). The National Health Strategic Plan identifies the most pressing health issues in the nation as a rise in non-communicable diseases, a lack of secondary healthcare in the outer islands, a demand for tertiary healthcare (e.g. cancer management, burn treatment, and other complex medical interventions), a lack of healthcare for the elderly, and environmental health challenges. Non-communicable diseases, or the chronic conditions that develop as a result of diet and lifestyle, call for further discussion, as they are reported to cause 80% of deaths nationwide. According to the Cook Islands-WHO Country Cooperation Strategy 2018-2022, non-communicable diseases constitute "major public health problems in Cook Islands" (p1).

Obesity statistics in the Cook Islands, as in the wider Pacific, regularly garner international media attention. At the time of the most recent Household and Income Expenditure Survey, conducted by the Cook Islands Statistics Office in 2016, 45% of the population was obese and 19% of the population was severely obese. In the 35-64 age group, three out of four people were obese, or 75.9% of the category. Within the 40-44 age group, 31% of people were severely obese. While body mass is not a perfect measure of health, obesity is a key risk factor for non-communicable disease. Other risk factors for non-communicable disease are tobacco and alcohol abuse. While a dedicated tobacco and alcohol survey has not been conducted, the 2016 census showed that 62% of males and 52% of females drank alcohol, and the 2006 census indicated that 29% of the population aged 15 years and over smoked daily. These risk factors must be understood in a historical context, as largely the result of a western diet and lifestyle.

Other determinants of poor health, such as poverty and abuse, can also be attributed to the colonial project. Early accounts penned by visiting doctors as recently as the 1930s suggest a picture of overall health, ranging from a lack of dental problems to a general lack of non-communicable disease. This is a salient point in the context of this research because the suggested scenario can be understood as a reality that already was, in the not-too-distant past, rather than a far-fetched and thus unattainable aim.

A Royal Navy surgeon who visited Rarotonga in 1893 wrote that he was shocked by a seeming absence of mental illness. He wrote: “Man in his primitive condition suffers from none of the anxieties and worries inseparable from the life of man in a civilised country, where the struggle for existence is carried on not with the hand but with the head” (Andrews 1894). Five generations later, mental health is an area of increasing concern. The Cook Islands National Suicide Prevention Strategy 2016-2020 notes that while there is no formal coordination for collecting data pertaining to suicide, Ministry of Health figures suggest a per capita ratio that is “very high”. While there is a Mental Health and Well Being Policy 2015 outlining the government’s objectives in the area of mental health, the Cook Islands National Health Strategic Plan for 2017-2021 considers that “efforts to address mental health in the Cook Islands are relatively new” (Te Marae Ora 2017, p33).

According to the terms of reference guiding this research, health refers to “a state of physical and psychological well-being, where body, mind, and spirit are in balance”. Defining health this way aligns with a Māori epistemology. Traditionally, health practitioners, or ta‘unga rapakau maki, treated illness of body, mind, and spirit, all at once. Their purview was ora‘anga kōpapa (health of the body) and ora‘anga manako (health of the mind); the two were understood as interdependent. The ta‘unga and their societies understood physical, mental, and spiritual health as connected with each other and with larger systems, too, such as community and the environment.

The definition of health that guides this research opens up opportunities to imagine and measure health in a more holistic way. Goal 7 of the current National Sustainable Development Plan is to “improve health and promote healthy lifestyles”, and the identified strategies for achieving this are reducing non-communicable disease, increasing investment in healthcare, promoting sexual health, promoting physical activity, increasing life expectancy, and improving mental healthcare. The National Health Strategic Plan, which defines its goal as “accessible, affordable health care and equitable health services of the highest quality”, focuses on improving health by training practitioners and increasing health budgets (Te Marae Ora 2017, p36). While these are all essential components of a healthy society, expanding our definition of health broadens the scope of solutions and encourages health policy that considers connections between food systems, families, communities, and the environment. It also enables the use of cultural empowerment as a health intervention, which can be powerfully effective, as case studies from around the world can attest, ranging from chronic disease interventions in Māori communities in New Zealand (Oetzel et al 2017) to wellbeing interventions in Mohawk communities in Canada (Murdoch-Flowers et al 2019).

The Pu Ara model, developed by Cook Islands researcher Dr Neti Tamarua Herman (2015) to study the well-being of young people in the Cook Islands, can serve as a starting point for thinking about health in a more integrative manner. The research model is based on the pū‘ara, or the pandanus tree. Its trunk represents strengths-based development in childhood, its

roots represent the family, its branches and stems represent social environments, its leaves represent physical/mental/emotional safety and socioeconomics, its flower represents the cultural/mental/spiritual/emotional aspects of a person, its fruit represents nutrition, and the ground in which it is planted represents connection to land. This model can act as a useful lens through which to understand the breadth and interconnectedness of determinants of health.

Already there is a policy guiding the pursuit of a healthier population. Te Papa Tutara A Te Marae Ora, the Cook Islands National Health Road Map 2017-2036, outlines the following vision, that by 2036:

- patients have better access to information and are involved in decisions about their health;
- healthcare is high-quality, equitable, accessible, and cost-effective;
- health gets more funding;
- health legislation meets the needs of the population;
- partnerships are strong;
- expanded tertiary healthcare is readily available to all;
- environmental health and climate change adaptation are supported;
- community-based facilities support the health of the elderly;
- the health service features more professional staff and specialists;
- the health workforce is valued and motivated;
- modern information and community technologies, including telemedicine or the distribution of health-related services and information via telecommunications technologies, are being used to full effect;
- records are well-kept and digital;
- resource allocations for addressing lifestyle diseases, health promotion, disease prevention, and environmental health risks are prioritised;
- primary care is expanded in the outer islands; and
- physical infrastructure, including hospitals, is refurbished.

This vision underpins the research on which this report is based, and acts as a springboard for thinking about health as both a sum of many parts and part of a broader context.

II. Methodology

Scenario sketching is a research methodology often used in futures studies, which is an area of scholarship that focuses on imagining and planning for outcomes that are preferable, probable, or possible. The research tool, used in strategic planning by both governments and corporations, has been proven to challenge long-held assumptions, identify new lines of inquiry, and open doors to further research (Ramirez et al 2015). Alvesson and Sandberg observed in 2013 that “many scholars tend to ask well defined and neat (and as a consequence, sometimes trivial) research questions rather than dedicating themselves to investigating large, messy, complex, controversial, and important societal issues”, and they pointed to scenario sketching as

a means of entering into the complexities and thus producing “interesting” research (p12). A scenario is a story about the future, which must necessarily begin in the present. It follows that the quantitative component of this research involved scans of media reports, national statistics, government reports, scientific journals, and reports produced by regional and international organisations.

The qualitative component of the research focussed on a half-day workshop in June 2021, to which the Office of the Prime Minister’s Central Policy and Planning Office invited experts in the areas being analysed by the research team. Two individuals turned up to the health discussion. One is a researcher with a background in education; the other is a cultural expert. While the absence of health experts constitutes a limitation of this research, the perspectives also added new dimensions to this scenario planning exercise. For an hour and a half, the two experts, along with two representatives of the Central Policy and Planning Office, considered the following questions: How do we define health? How do we measure “healthy”? How do we get healthier, and what’s standing in our way? They were asked to reflect on the political, economic, social, technological, legal, environmental, and cultural factors that could potentially influence efforts to achieve a healthier population by the year 2050. This visioning exercise was guided by a PESTLE analysis, or a research tool designed to consider the specific external factors that might impact a scenario, idea, or plan. (A cultural category was added to the PESTLE framework for the purposes of this research.) The PESTLE analysis is a useful method often employed in long-term strategic planning efforts.

Notes and audio recordings of the discussion were transcribed, considered by the researcher, and fitted into a broader framework of scholarship in order to construct two pathways for achieving the given scenario. While the core components of the pathways were imagined during the workshop exercise, research and evidence were added later, as were some additional elements. The first pathway does not consider budgetary constraints, which are a very real threat to planning, particularly in light of the long-term economic impacts of the coronavirus pandemic and the costliness of adaptation to climate change. The second is less expensive, but also less ambitious. A draft of this report was circulated to workshop participants, who provided feedback that informed the final draft.

This research confronted several limitations. The first was the timeframe and scope of the workshop convened to gather qualitative data. Also limiting was the level of participation; experts representing such areas as primary healthcare and mental health were not present.

III. Findings & discussion

Below are two pathways to achieving the “healthiest population” scenario. The second can be viewed as a starting point from which planners can work toward the first.

An ambitious pathway

On this pathway, parents receive support and guidance in their first 1000 days of raising a child. Studies show that failing to invest in mothers/father and children in the first 1000 days following a birth can result in higher healthcare costs over the course of the child’s life

(Schwarzenberg & Georgieff 2018). Poor nutrition within that period, for example, can have a profound impact on brain development and future health. On this pathway, media advocacy and education for parents raise awareness of the long-term impacts of neglect and abuse in childhood. Research shows that trauma in childhood is a strong determinant of poor health. One example of this is the Adverse Childhood Experiences (ACEs) study, a 25-year-long clinical study that involved more than 17,000 participants (Felitti et al 1998). The research was based on a questionnaire that included such questions as: “Did an adult or a person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way?” and “Did a parent or other adult in the household often or very often swear at you, insult you, put you down, or humiliate you? Act in a way that made you afraid that you might be physically hurt?” and “Was your mother or stepmother often or very often pushed, grabbed, slapped, or [did she often have] something thrown at her?” Some distinct findings emerged, including a clear link between a lot of “yes” answers and such issues as chronic disease, cancer, diabetes, mental illness, depression, and substance abuse.

An ambitious pathway to achieving the given scenario involves **family-centred treatment approaches** that focus on emotional and conflict management. This is an important intervention for addressing not only high rates of intimate partner violence, which leads to poor health outcomes, but also the prevalence of child abuse. Herman’s research (2015) provides some insight into what this treatment might look like. She found that young people in the Cook Islands need to be connected to their families and communities in order to be healthy, and that they also need to be empowered, have a voice, and learn the competencies and leadership skills that prepare them for adulthood. She writes that encouraging adults to offer “opportunities, learning experiences, and support” to children “reflects a major shift in thinking in the Cook Islands” (p.iii).

On the ambitious pathway, the government provides support to families facing extreme financial hardship and other conditions that increase the risk for ACEs. Education improves with the introduction of new curricula and the recruiting, and incentivizing, of educated teachers. Recruitment processes focus on teachers with advanced degrees. Researchers are still trying to determine the correlation between education and health. One literature review summarises three pathways through which education might affect health: increased health knowledge, which enables healthier behaviours; higher chances of being employed and earning higher wages, thus avoiding the chronic stress associated with poverty; and social and psychological factors, including a sense of control (Zimmerman & Woolf 2014). On this pathway, reliable, inexpensive internet has broadened access to higher education and jobs, which are both social determinants of health. A knowledge-based economy is growing. Participants in the workshop on which much of this report is based imagined a society that is “creative, positive, and innovative”.

On this pathway, the political situation is stable, and elected representatives are selected based on their education, rather than their family and social connections. Democratic processes are transparent and there is political will to implement policies that encourage healthful behaviours. Studies show that policy can act as an effective tool for shifting social norms. For example, Levy et al (2007) found that higher cigarette taxes, clean air laws, and media campaigns considerably reduced adult smoking rates, especially when combined as a comprehensive strategy. The researchers wrote of a positive feedback loop: “There may be important synergies as smoking is de-normalized, which can fuel policy change, which in turn

can lead to further changes in societal norms that reduce smoking rates” (p12). Policy was, in part, found to not only reduce smoking initiation, but also to encourage quitting, which can halt or even reverse many health problems associated with smoking. It is worth noting that law has been an important part of many public health successes, including motor vehicle safety, infectious disease control, and a safer food supply (Gostin et al 2019).

The ambitious pathway features livable wages and an affordable cost of living for all. A large body of research suggests an inextricable link between poverty and poor health; notably, poverty can be both a cause and a consequence of poor health. The cycle is vicious. Poorer people are at increased risk for chronic disease, and also most impacted by it. Breastfeeding, attending school, and working to grow food or earn a living depend on a baseline level of good health, and particularly for people facing financial hardship, health is a “crucially important economic asset”, according to the World Health Organization (WHO) (2003, p20). The WHO (2013) has adopted a “pro-poor health approach”, which prioritises the health of poor people by building the capacity of the public sector; strengthening partnerships with the private sector and not-for-profit sector, including faith-based groups; and ensuring equitable health financing systems. The ambitious pathway adopts a pro-poor health approach and targets strategies that increase the economic mobility of families.

Food and water security are cornerstones of a healthy population, and thus of an ambitious pathway. Food insecurity refers not only to hunger and chronic hunger, but also to lack of access to healthy, nutrient-rich foods. The traditional Cook Islands culture was grounded in the production, preparation, and sharing of healthy, nutrient-rich foods. Several months before the coronavirus became a pandemic, according to the Statistical Office’s Statistical Bulletin, the country was importing 14 times the value of what it was exporting, and the majority of these imports were nutrient-poor foodstuffs (Cook Islands Statistics Office 2019). While most people in the outer islands continue to eat from the land and sea, many people on Rarotonga rely on these imports. As one workshop participant put it: “We moved from being independent, in terms of food production, to being dependent”. While local food production increased during the coronavirus pandemic, data indicating to what extent is not yet available. On the ambitious pathway, local food production is thriving, on Rarotonga as in the pa enua. Agriculture and fishing are supported by seed funding and assistance with delivering products to market. Backyard gardens are proliferating, supported by the distribution of seeds and education programmes. Encouraging local food production is tied to monitoring and supporting environmental health. Adapting to climate change might, for example, involve growing different foods in different places, on account of rising sea levels and saltwater intrusion into the water table. Making food systems resilient to climate change is a priority on this pathway.

Healthcare practitioners have, or are pursuing, tertiary qualifications on the ambitious pathway. Increased investment in health is expanding primary, secondary, and tertiary healthcare services on all islands in the Cook Islands. It is perhaps worth noting that studies show increasing investment in healthcare does not necessarily guarantee health. The United States, for example, spends more on healthcare than any other country, but the Institute of Medicine (2013) found that compared to other high-income countries, Americans have the highest incidence of alcohol- and drug-related deaths, as well as the highest rate of obesity and diabetes and the second-highest rate of heart disease. This supports the idea that a holistic approach might yield better results. On the ambitious pathway, telemedicine targeting both physical and psychological

conditions is available and readily accessible, and patients are able to receive care somewhere private.

There is strong support for mental health on the ambitious pathway. The research suggests parallels between support for mental health and support for a Māori approach to healthcare. It is interesting to note that the ta'unga, the traditional healthcare practitioners, once delivered “talk therapy”. They tested for maki tūpāpāku, a form of spiritual imbalance, and when a problem was identified, they talked to a patient, his/her spouse, parents, children, and relatives to discover its origins. It follows that on the ambitious pathway, there is widespread support for immersion schools that teach Cook Islands medicine, build Cook Islands identity, and perpetuate Cook Islands language. Studies show that cultural continuity, which Oster et al (2014) define as “being who we are”, is foundational to health. On this pathway, legal protections exist to protect traditional medicine and healthcare heritage from intellectual property theft.

There is also strong support for vulnerable groups, including migrants, caregivers, disabled persons, the elderly, and people struggling with substance abuse and addictions. Support services are well-resourced and support groups meet regularly. A priority on the ambitious pathway is strengthening support for people experiencing domestic violence, which can lead to a range of poor health outcomes, from physical (e.g. injuries and disordered eating) to mental (e.g. depression and post-traumatic stress disorder) to reproductive (Stockman et al 2015). This pathway offers ample opportunities for healthy social connections, ranging from sporting events to faith-based meetings to educational workshops.

A moderate pathway

The ambitious pathway provides a benchmark toward which planning efforts can aim. A moderate pathway should include efforts in each of the areas mentioned above, but focus more on some of the less costly actions. The core of this pathway, as decided in the workshop convened by the Central Policy and Planning Office, is cultural empowerment. On this pathway, there is “a community that identifies strongly as Cook Islands Māori” represented by policymakers who are “pro Cook Islands Māori”, though “not racist”. Part of the moderate pathway is developing a health research methodology grounded in Cook Islands principles. In a workshop convened to discuss the suggested scenario, a participant described the Māori view of health this way: “If your mind is not well, then your body is not well. If your body is not well, then your mind is not well. Because it’s all interconnected, whereas in western medicine, they treat one or the other. That’s the difference”. Participants identified a need to develop a new health research methodology that integrates both approaches to health, and suggested calling it ‘Ātui Ora.

On this pathway, there is support for groups, projects, and educational programmes designed to support holistic health and Cook Islands culture, which are woven tightly together. There is also a willingness to consider other indigenous perspectives; an example is traditional Chinese medicine, which centres on the qi, or energy/life force. Some researchers have compared this to the Cook Islands concept of vaerua (Temata 2018). Broadening institutional support for Māori methods of healthcare is a foundational part of this pathway. This is a means of overcoming a limitation of western medicine, which is that individuals are not treated as human beings with minds, emotions, and spirits. It also opens the door to new (old) healing

interventions, such as storytelling, prayer, and family meetings. The moderate pathway demands the political will to create an enabling environment for healthy decision-making. Other areas of focus on this pathway are food security and support for vulnerable populations.

IV. Further discussion

While all health interventions and programmes should be designed to suit the specific context of the Cook Islands, policymakers might also consider examples of successful community-based health interventions elsewhere. One is the North Karelia Project (Puska 2002). In the early 1970s, a low-income area in Finland called North Karelia had the world's highest rate of heart disease. The North Karelia Project, coordinated by the WHO, became the first major community-based project for cardiovascular disease prevention. Organisers involved schools, non-profit organisations, primary healthcare providers, local media, supermarkets, and the agriculture industry; their interventions spanned innovative media and policy changes. By 1995, there had been a 73% decline in heart disease. The intervention was flexible, based on continuous monitoring and feedback. The project has become a model with many international applications. Puska (2002) determined that the key was “working within the community with its numerous organizations and with strong people’s involvement”.

Another example of a community-based health intervention that has borne results is the Blue Zones Project, which is grounded in the idea that longevity is determined by nine principles that are common among the longest-living people in the world. (These people are found in Sardinia, Italy; Okinawa, Japan; Loma Linda, California; Ikaria, Greece; and Nicoya Peninsula, Costa Rica) (Buettner & Skemp 2016). In the places with the highest concentrations of centenarians in the world, people eat mostly plants, don't overeat, exercise naturally (as opposed to in a gym), manage their stress, have an occasional drink, have a faith, have a sense of purpose, put family first, and live in a community. The Blue Zones Project has worked with local governments and organisations to modify urban environments in order to enable these kinds of choices; interventions have included working with supermarkets and restaurants to help people change the way they eat, and working with schools to adopt policies that encourage healthy eating. The takeaway from both of these examples is that partnerships and memorable marketing can be effective strategies for improving health.

According to the most recent Bloomberg Global Health Index report (2019), Spain is the world's healthiest country. The index considers such factors as tobacco use, obesity, availability of clean water, life expectancy, malnutrition, and causes of death to rank countries in terms of health. The highest possible score, according to this method of measurement, is 100; Spain scored a 92.75 in 2019. What's interesting to note is that Spain has high rates of tobacco use and alcohol use, suggesting not all determinants of health are present in the world's healthiest country, at least according to the Bloomberg index. This can perhaps be interpreted as evidence that diet and exercise, areas in which Spain scores high, are particularly important precursors to health.

A related point that warrants further discussion pertains to metrics for measuring health. The qualitative component of this research focussed on integrating both Māori and western conceptualisations of health into any policy or planning related to health and healthcare, but most indicators of health are derived from western models. The Cook Islands-World Health

Organization Country Cooperation Strategy 2018-2022 uses the following indicators to measure health, among others: number of skilled health workers per 10,000 people; per capita total expenditure on health; total expenditure on health as a percentage of GDP; immunisation levels; life expectancy; under-five mortality rate; maternal deaths; maternal mortality ratio; adult mortality rate from non-communicable diseases among people between 30 and 69 years old; suicides; tobacco use; population using improved drinking-water sources; population using improved sanitation; and instances of neglected tropical diseases. The Cook Islands National Health Strategic Plan for 2017-2021 identifies such indicators of health as infant mortality rate, neonatal mortality rate, child mortality rate, maternal mortality rate, immunisations at one year, life expectancy, number of hospital beds, and use of health services. While all of these indicators enable the collection of critical data, there may be room to expand systems of measurement and develop new indicators of health. During the workshop convened to discuss the scenario on which this report is based, the four participants identified the following as indicators of health: life expectancy; mental health disorders; coverage of services on the spectrum, with the spectrum defined as ranging from depression to psychosis; safety; and a health workforce trained “in spiritual aspects”.

Creating alternative metrics for the Cook Islands would require further research, but the concept has been well-studied among First Nations communities in Canada. Fox (2018) documented a planning session led by the Alberta First Nations Information Governance Centre, during which 20 First Nations communities developed new indicators of health, grounded in culture. Examples include: number of people who speak their native language, number of available programmes aimed at youth participating in conversations with knowledge and wisdom keepers, number of community events that present opportunities for laughter, number of individuals who identify as experiencing emotional trauma, and number of programmes that teach about land.

V. Conclusion

It would behoove policymakers to consider the healthfulness of the early Māori as a starting point for designing community-based interventions. Integrating Māori models and values into a strategy for achieving health is a means of overcoming the limitations of western health systems, namely the high cost of use, the tendency to treat a symptom without addressing their underlying causes, and the reliance on the scientific method as the sole source of information (Knibb-Lamouche 2012). It is also an acknowledgement that colonisation has resulted in some of the worst health outcomes in history for indigenous people, including in the Pacific Islands. Fusing Māori models and biomedical models can yield innovative approaches to health; history shows that innovation occurs at the intersection of differing ideas.

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Scenario Research

Scenario 3: The Cook Islands is well prepared for climate change and its effects

For the Cook Islands National Sustainable Development
Agenda 2020+

Report prepared for

Office of the Prime Minister

Central Policy and Planning Office

Dr C A Tucker

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Disclaimer

The views expressed in this report are those of the author and do not necessarily reflect the views of the OPM. Apologies for any errors or omissions that may have been unwittingly made.

Executive Summary

This report provides findings from one of three scenario research cases that have been undertaken to assist in planning for future progress in the Cook Islands National Sustainable Agenda (NSDA) 2020+. A scenario sketching method drawing on a 'PESTLE' analysis, and underpinned by 'akapapa'anga and ka'a were used to guide the collection of data, findings, analysis and recommendations. Findings are divided into two main parts according to two scenario pathways: 1) "an ambitious yet expensive pathway to reach a transformative goal; and 2) a moderate or conservative and affordable pathway to reach a moderate or conservative goal" (OPM, 2021). This report recommends that the Cook Islands Government continue their mitigation and adaptation strategies toward best preparing the Islands for likely future impacts of climate change.

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Introduction

This report provides an overview, findings, conclusions and recommendations from a scenario sketching analysis towards the development of a new Cook Islands National Sustainable Development Agenda (NSDA) 2020+. A total of three scenarios are being considered for future planning:

- A comfortable population, specifically: “a comfortable income is accessible for all”;
- A healthy population, specifically: “the Cook Islands has the healthiest population in the world”; and
- A happy population, specifically: “the Cook Islands is well prepared for climate change and its effects”.

This report considers the third scenario, as part of providing a 100 year plan toward the sustainable development of the Cook Islands.

The current iteration of the National Sustainable Development Plan (NSDP) consists of 16 goals (which incorporate 66 indicators), of which Goal 13 is most closely aligned with the concerns of this report: “Strengthen resilience to combat impacts of climate change and natural disasters” (OPM, 2019). The NSDP describes the Cook Islands as a nation vulnerable to climate change (and other natural disasters). However, the emphasis in the NSDP is mainly on cyclones (two of the three indicators consider cyclones, while the 3rd is a broader resilience index) (OPM, 2019).

This report takes Goal 13 further in a sense by considering two pathways towards achieving the third scenario, that ‘The Cook Islands is well prepared for climate change and its effects’. The two paths consist of an ‘ambitious’ approach that is expensive but that can have a transformative impact, and a second, ‘moderate’ path that is more affordable and that can have a moderate outcome (OPM, 2021). A ‘PESTLE’ analysis is used to build these pathways, and the research overall is underpinned by ‘Akapapa’anga and ka’a’, which refers to the underlying significance of Cook Island Māori society and connections to each other, the land (enua), the ocean (moana), the air (mareva), and wider concerns and hopes. Both pathways will help inform future policy development towards achieving at minimum, a moderate outcome for the Cook Islands in helping protect the land and people from climate change impacts.

Vuuren et al (2014, p376) identify two key dynamics to take into account when considering scenario analysis where climate change is a key focus: 1) “magnitude and extent of climate change and associated environmental changes”; and 2) “trends in human development in relation to the drivers of climate change, the capacity to mitigate greenhouse gas emissions, and the vulnerability and capacity to adapt to climate change”. What this means in essence, is that the level or extent of climate change along with socio-economic developments are the significant

determining factors in any nation's ability to adapt or mitigate effects of climate change and the related costs.

The Cook Islands is a vulnerable nation in terms of climate change, for example, of the 12 inhabited islands, seven have a maximum highest point of just 15 metres above sea level. A report from the Pacific Climate Change Science Program (PCCSP) (2011) partners states that temperatures have been increasing in Rarotonga and Penrhyn since the 1950s by 0.04 degrees Celsius each decade – though more recent research indicates that this figure is greater at 0.09 degrees (UN Climate Change Conference, 2018). No clear trends exist overall in terms of Cook Islands' rainfall. The same document reports sea level rise of around 4mm per year since 1993 – slightly more than the global average – while ocean acidification has also been increasing, impacting coral and hence reef ecosystems.

The Intergovernmental Panel on Climate Change (IPCC) forecasts warming ocean temperatures, more extreme temperatures, changes in rain patterns including increased frequency of droughts and flooding; as such, long-term future planning for the Cook Islands is certainly imperative (IPCC, 2018). Estimates for 'medium' or 'middle-path' temperature warming for the South Pacific are 2 degrees Celsius by 2100 (United Nations University, 2015). The general, main effects that Pacific Island countries can expect according to Campbell & Warwick, (2014, 7) are summarised in Table 1 over the page.

More specifically for the Cook Islands, by 2055:

- sea level rise is projected as being between 10 and 30cm;
- ocean acidification is expected to continue;
- temperatures are expected to increase by between 0.7 and 1.9 degrees Celsius (updated estimates indicate a range of between 2.6 and 6.14 by 2050 depending on the severity of climate change effects [Isaac Glassie, pers. Comm., 2021]).
- increasing numbers of very hot days and less cooler weather;
- rainfall in the Southern group during the rainy season is expected to increase, and extreme rainfall is expected to occur more often while droughts are expected to become less frequent (n.b. that rainfall predictions are relatively inconsistent); and
- cyclones are expected to be less frequent by the end of the century, however wind speeds are expected to increase by 2 to 11% and rainfall intensity by around 20% within 100kms of cyclone centres (PCCSP, 2011).

In short, the Islands are being impacted by climatic change and will continue to be in the foreseeable future.

The Cook Islands *Ministry of Finance and Economic Management* (MFEM) (2021) website states that “national and local development strategies give emphasis to our heritage and resilience as

a large ocean state promoting low carbon economic development alongside social and environmental benefits”. Local knowledge has an important role here in understanding climate change over time, including adaptation planning (Rongo & Dyer 2015; Scally & Doberstein, 2020).

| Main effects of climate change on Pacific Islands and implications for community security | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Climate change impact | Community security impact |
| Sea level rise Inundation Coastal erosion Storm surge exacerbated | Land security in coastal and atoll locations may be severely reduced and there may be impacts on livelihood security through loss of agricultural land and salinization of soils, plants and water supplies. |
| Water resource impacts Rainfall uncertainty Increased frequency and magnitude of droughts Reduced quantity and quality of water resources Salinization | Livelihood security may be affected by decreased agricultural productivity and habitat security may be adversely affected by water borne diseases. |
| Coral reef health decline reef degradation as a result of increased sea surface temperatures and increased ocean acidity | Livelihood security may be compromised by reductions in fisheries and other marine resources dependent upon healthy coral environment. Land security may be reduced by increased exposure to high waves and storm surge. |
| Agricultural production decline adverse effects from a variety of processes including temperature rise, reduced water availability, salinization, exposure to tropical cyclones (wind, rain and wave damage) | Reduced agricultural productivity would impinge upon livelihood security and where extremely severe may render some locations uninhabitable. |
| Human health challenges changing disease vectors such as malaria, dengue increased incidence of water borne disease Increased incident of heat related diseases | Effects on human health are likely to reduce the habitat security of island settlement locations and where severe may render some locations uninhabitable. |

Table 1. Main effects of climate change on Pacific Islands and implications for community security.

In the *Kaveinga Tapapa – Climate & Disaster Compatible Development Policy 2013-2016* (Government of the Cook Islands, 2013, p5), then Prime Minister Henry Puna stated “The journey that we must take [to be prepared for disasters and climate change] will only be as effective as the plans and policies that direct us”. The Policy statement continues to explain that the current approach for the medium to short term is to “stay and adapt”, while longer term planning will need to take into account the possibilities of people being displaced, migration, and having to

resettle into safer areas away from coastlines and coral atolls, which could mean, for some, relocating to another island (or even country) (p7).

The more recent *Cook Islands 2nd Joint National Action Plan 2016 – 2020* (OPM, 2016) states their vision as “A safe, resilient and sustainable Cook Islands”; the underpinning goal of this plan is “strengthen climate and disaster resilience to protect lives, livelihoods, economic, infrastructural, cultural and environmental assets in the Cook Islands in a collaborative, sectoral approach” (OPM, 2016). Main themes of current policy directly related to climate change in the Cook Islands are that development needs to be resilient and low carbon.

Cook Islands National Goals for Climate Change

The vision statement in the Cook Islands Climate Change Policy 2018 – 2028 is: “A climate resilient and sustainable Cook Islands” – “Akatere rangatira kia roa e te turanga ketaketa o te Kuki Airani kit e tauī’anga reva” (CCCI, 2019, 7). Resilience can be defined in a multitude of ways. *The Framework for Resilient Development in the Pacific* (2016, 7) defines resilience as:

the ability of a system, community or society exposed to hazards, and/or climate change, to resist, absorb, accommodate, recover and transfer the consequences of a hazard event or of climate change in a timely and efficient manner. This includes through the preservation and restoration of its essential basic structures and functions. To effectively build resilience, responses to climate change and disasters must include consideration of a range of factors.

In the Cook Islands, both adaptation (that increases resilience) and mitigation actions (reducing emissions) are important, however it is adaptation that is given priority.

Three longer-term, stand out considerations related to climate change in the Cook Islands are:

1. Sustainable development across all sectors of society;
2. Strengthening resilience to climate change impacts through “a coordinated, inclusive, culturally appropriate adaptation and mitigation” program; and
3. working collaboratively in climate change activities at both domestic and international levels (Climate Change Cook Islands [CCCI], 2019, 7).

Policy objectives outlined in the Cook Islands Climate Change Policy 2018 – 2028 include adaptation and mitigation, mainstreaming, along with international engagement, each of which is briefly described in the following:

Adaptation and mitigation: mitigation objectives include promoting low carbon development; 100% renewable energy and energy efficiency by 2025, and confirmation of a net-zero emissions target by 2040. Adaptation objectives include increasing resilience through health initiatives

such as lowering non-communicable disease rates; promoting climate risk assessment and climate proofing; gaining a better understanding of climate loss and damage and how this might be applicable at a national level, and strengthening ecosystem and community based approaches to building climate change resilience.

Mainstreaming: achieving climate related goals through coordinating efforts and ensuring that climate change is mainstreamed across all sectors of government; a more collaborative rather than ad hoc approach. Areas of significance here include: 100% climate mainstreaming with development agendas across all sectors; strengthening capacity and capabilities of Cook Islanders involved in projects and programs; innovations around technology and increasing quantitative analysis on vulnerability and adaptation assessments; strengthening education and public awareness including at schools; 100% involvement for gender issues across climate change activities; undertake a technology needs assessment for mitigation and adaptation before investing in any new technologies; establish standards and procedures that foster green investment; and increase access to climate funding as part of development expenditure.

International Engagement: commitment to meeting international obligations, by focusing on domestic actions.

The above all feeds into these policy measures: a low carbon approach to development; strengthening resilience and reducing vulnerability to climate change; water and food security; resilient socioeconomic and ecological systems; community participation; akono'anga Māori (working with traditional leaders, utilising traditional methods and knowledge to assist with minimising climate change impacts); building capacity and education; and implementing adaptation and mitigation activities.

Newport's (2019) thesis work identified that climate change mobility is not a large concern in the Cook Islands relative to other issues, but this was largely due to climate change and mobility matters not being considered as connected. She suggests nonetheless, that there is room to explore this matter further, noting also that there is a complicating matter involved here: that of depopulation (or concerns about depopulation to be specific).

The prospect of displacement from one's home or possibly homeland, then relocation or migration, is unsurprisingly, a sensitive, contentious and serious matter. It has been a topical point in climate change talks for some time, with numbers of 'environmental migrants or refugees' – or people displaced due to adverse weather or climate change related disasters – increasing (Migration Data Portal, 2021). Shamshad Akhtar (cited in Campbell and Warwick (2014, iv) stated that:

The impacts of climate change will not be consistent across the Pacific. Different countries islands and communities will experience varying impacts of climate

change with differing levels of severity. It is expected that vulnerable populations, including women, youth, the elderly and people with disabilities will be the most vulnerable to these impacts. Climate change is likely to induce migration in certain geographic “hot-spots”, including urban areas; atolls; drought prone locations; as well as in coastal, delta and river areas.

The International Organization for Migration (IOM) has estimated that globally, 25 million to 1 billion people will migrate due to climate change by 2050; 200 million is estimated as the most likely figure (Campbell & Warwick, 2014). Of the five localities identified as ‘hot-spots’ for higher-impact climate related vulnerability, the Cook Islands fit two: non-urban atolls, and coastal communities.

In all, there is much at stake for nations of the South Pacific, and the Cook Islands are no exception. While groundwork has been laid with policies and strategies both for adaptation and mitigation underway, there is ample scope for further discussion and action in this space. The following section outlines the methodology used to advance climate change related discussion and to assist in further policy development as part of work on the National Sustainable Development Agenda 2020+.

Methodology

The scenario sketching / analysis / planning method as it is variously called, is a future-oriented research approach that uses the notion of a ‘snapshot’ of the future, that concentrates on a particular issue, threat or goal. Scenario sketching is a way of trying to determine and evaluate uncertainties in relation to the development of different future pathways. This approach dates back to the 1970s, and since this time has shown to hold a number of benefits, such as improving decision-making, diagnosing issues and inertia, and identifying innovative opportunities (Sarpong & Amankwah-Amoah, 2015). The scenario approach has been used by scholars to advise or guide a range of organisations or governmental bodies in relation to climate change mitigation and resilience strategies.

The scenario analysis in this report is guided by the research Terms of Reference (ToR) (OPM, 2021), which requests that two pathways be sought for firstly, an ambitious climate change result where the Cook Islands are well prepared, and secondly, a more moderate pathway for more conservative outcomes. This involves firstly identifying what an ‘ambitious’, best-case scenario would look like, and secondly, what a more-moderate snapshot of the future might look like. This aspect of the work was developed in a half-day ‘scenario building workshop’ with 5 experts, and incorporated feedback from the other two workshop groups.

The half-day workshop schedule was:

- Pure (prayer) and Introductions;
- Workshop overview and purpose;
- Break out groups (three groups for the three scenarios);
- Group presentations of scenario and pathway ideas and feedback from other groups; and
- Pure and finish.

Following the workshop, draft reports of workshop scenario pathways were written up by the researchers guided by a PESTLE analysis. This was used to help develop the two scenarios to ensure that pathways were comprehensive; PESTLE includes: political, economic, social / sociological, technological, legal and environmental. However, there are many other areas that can be incorporated (see Carter & La Rovere, 2018, for example), and in this case, ‘cultural’ – which could be linked in with social or be stand-alone – was a significant part of analysis. Once reports were drafted, they were sent to workshop attendees for comment /editing / refinement, with feedback then incorporated into the final version of the two scenario pathways.

Research Limitations

Given research limitations in terms of time frames and the scope of the ToR, the impact of different climate change intensities is not explored (e.g. less severe than expected, around what is expected, more severe than expected). The nature of climate change means that it is very difficult to accurately measure or predict what likely impacts will be in given time frames, which is an important consideration in scenario analysis. Instead, emphasis will be placed on current scientific analysis of the most likely trajectory for climate change, as it applies to the Cook Islands (or South Pacific small island nations more broadly).

Furthermore, there were limitations around the time available for experts to work on scenario snapshots and pathways: there was approximately 1 hour and 20 minutes dedicated to the specific scenarios, and less than an hour for group feedback. With five individuals involved in the discussion, each with expertise, concerns and ideas to share, it was difficult to get the level of depth and detail that such an extensive and important issue necessitates. Nonetheless, the process of returning report drafts back to the experts involved in the workshops for feedback, means that elements that may have been lost or just glossed over in workshops were able to be incorporated into the final scenario pathways.

Ethics

There are no notable ethical concerns to be aware of for the purposes of this research. Informed consent was gained from the workshop attendees.

Findings and Discussion

A key assumption being worked from is that climate change will impact the Cook Islands through temperature rise, rainfall variation, extreme weather events and sea level rise. In the following, a moderate pathway toward a Cook Islands that is 'well prepared for climate change and its effects' by 2050 is first offered, followed by a more ambitious pathway. In essence, the 'ambitious' pathway extends and builds on the moderate pathway, but is more costly. First, is a 'snapshot' of what a Cook Islands that is 'well prepared for climate change and its effects' looks like.

Cook Islands 2050 scenario snapshot

Being prepared for climate change and its effects means having the ability to withstand the worst impacts of climate change. This necessitates having infrastructure and strategies in place so that people, the economy and environment are able to survive and thrive through adversity. Important in this is maintaining connections to, and an understanding of, the land and local ecosystems through indigenous knowledge that is passed on through generations from a young age. Having sound data management that is accessible to all and efficient will assist in this endeavor, so that immediate through to longer term planning and disaster prevention can be delivered and acted on as proficiently as possible, as needed.

A moderate pathway

A moderate pathway to a Cook Islands that is well prepared for climate change and its effects would begin with protecting what we currently have; in short, utilizing adaptation strategies where possible. This would mean that each inhabited island is as self-sustainable as possible. It also means recognition of the different challenges faced in the different islands, particularly between pa enua islands and Rarotonga.

Looking after the environment in all ways possible today can only be of benefit for future environmental and social wellbeing. Trees were put forward at the workshop, as an important element of this given they can assist with coastal erosion prevention, improved drainage, and reaching carbon neutral goals. Over the last year or so, many mature trees in Rarotonga (notably many Toa / Ironwood trees) have been cut down. While this has been done to help prevent future problems with overhead power lines and in order to widen roads, plans ought to be promptly implemented so that (strategic) tree planting can occur so that the benefits of this, as noted above, can be realised in coming years as the trees grow.

A key area for adaptation is infrastructure, and in particular, measures that will assist in drainage (for flood prone areas), potable water collection and retention (for times of drought), and having buildings along with other critical infrastructure such as roads, power, and telecommunication systems that are as resilient as possible against adverse weather.

Improved accessibility and reliability of telecommunications systems / digital technology / communications technology is pivotal for assisting planning, strategies and communications. Firstly, these technologies can be used for education generally, and for disseminating information about developments and plans to communities. Accessibility is likely to be more difficult for those in the pa enua – so there would need to be ‘on-the-ground’ systems to assist with this (possible community based so that no one is left out). Another area where digital communications systems are important is for monitoring, so that information needed is available and obtainable by those needing it; when it comes to emerging or imminent emergency / risky situations, the ability to access information in a fast and efficient manner is imperative. This relates to the need for improved data management services, for example, so that evidence needed to assist in planning and decision making can be easily sourced, ideally from one central online depository.

Health services could be effected by temperature change from anthropogenic climate change: as temperatures rise, the likelihood that new health illnesses and issues may arise, increases. An example could be from disease carrying mosquitos. Mental health support services may be needed also to assist people in dealing with issues associated with climate change implications, from stresses associated with coping with more frequent extreme weather events, through to facing the possibility of relocation.

Important throughout all of this is planning in the short term for long term goals. Land use planning in terms of building and development, especially in coastal and low-lying areas, needs to be looked at closely and strengthened. This may also necessitate having to rethink how dwellings are organised e.g. whether there ought to be a shift toward more intensive (homes that are located closely together or potentially apartment blocks or similar) as opposed to the current norm which is more extensive, where houses are often quite scattered. This can allow for easier management of waste and water systems. If the population in Rarotonga in particular were to increase (due perhaps to relocation from the pa enua or low-lying coastal areas due to increasing high tides and sea level rise, or as a result of natural population growth, returning Cook Islanders or immigration), then looking at the development of more intensive living situations would become even more critical.

The potential for forced relocation or migration for those in the pa enua in particular is real. The hope is that people will be able to stay in the pa enua, and be encouraged to do so. This is significant for preventing any further disconnection for the land, which could lead to a downward spiral in terms of language and culture loss. Part of encouraging people to stay is ensuring that younger generations are educated about their links to the land and place. The way of life in the pa enua is considered different to that in Rarotonga in terms of more traditional knowledge and culture *being* the way of life in the pa enua, whereas in Rarotonga it is more often ‘taught’. A

focus on targeted education in Rarotonga is therefore even more important in some ways for remaining connected or reconnecting with ones culture, and for building on traditional knowledge that can assist with a more intimate understanding of the environment that we live in.

This education focus is not just for youth, but for the entire population. This links back to rethinking land use planning and controls that may need to be implemented. For example, rather than filling in swamp or wetland areas for development, an appreciation of the rich biodiversity and other benefits of such areas needs to be understood so that what may have been considered 'waste' land, is understood more intrinsically for what it is. This is where local knowledge holders could be encouraged to share their knowledge, not just in schools, but to the wider community. Whether the 'wider community' is seen as Cook Islanders only or first (as it is their lineage), or whether it is all who reside here for one reason or another (and therefore, it is hoped, would appreciate having a greater understanding and hence respect for the land and people), remains a sensitive and contentious issue for many in terms of what the desired current and future demographic make-up of the island is.

Food security is a matter that requires ongoing attention: the pa enua and Rarotonga each have unique vulnerabilities and advantages in this respect. Fortunately, kai moana is relatively bountiful and available for all the islands; however, ocean acidification may affect numbers and kinds of fish available in different areas. Coral bleaching can also impact reef biodiversity having negative impacts on kai moana. On land, the pa enua are advantaged by being much more self-sufficient and having an overall closer relationship with the land. Rarotonga is much less self-sufficient and has increasingly come to rely on imports; as well, less land is available for agricultural production as it has given way to mainly tourism-driven or inspired development. Rarotonga is however more readily able to receive cargo via ship or airplane faster if needed. Planning to assist in catering to the differing needs of Rarotonga and the pa enua for food security in times of famine needs to be ongoing; if famine become more enduring in some islands (perhaps due to soil salinisation from increasing frequency and size of high tides, or coastal land loss due to rising sea levels), then strategic planning for relocation needs to be addressed as a last resort measure.

A number of policies are already in place and being implemented to try and mitigate the effects of climate change for the Cook Islands, as part of a global community that is or will all be impacted in some way by climate change. Targets are in place for converting to 100% renewable energy by 2025. However, land-based transport is the biggest emitter, followed by electricity. Rarotonga is the main island where these areas are more problematic; the pa enua tend to have smaller vehicles (motorbikes, scooters), while there are an increasing number of large vehicles in Rarotonga, as well as a large fleet of rental vehicles. Electric vehicles are slowly growing in

number, but unless they are charged using solar charging stations, diesel is still being consumed. The public bus system is used by few locals – other than school children. Rethinking how we move around the island and incentivizing lower impact options such as public transport, walking and cycling, e-vehicles that are solar charged or smaller vehicles is worth looking at as a way to lower carbon emissions and meet the Cook Islands international goals.

An Ambitious Pathway

This approach builds on the preceding. All of the above should be addressed to the greatest extent possible. All that follows will be additionally beneficial, but also more costly, and may require particular expertise, education or experience (e.g. technology or engineering experts in specific fields). An ambitious pathway means that all feasible adaptation strategies are in place: planning and work to undertake these strategies will have been instituted, with positive outcomes already being achieved. Each island is equipped to be self-sustainable for extended periods if necessary, and has measures in place to mitigate the impacts of sea level rise and more extreme weather. Socio-culturally, populations have adapted to some changes in how things are done and thought about, for example, new planning requirements for development. Through general and localised knowledge and understandings that have been widely shared, everybody is included in decision making and planning, and a strong sense of community and connection to each other and the land is achieved. Technological systems are in place to assist with emergency management, monitoring and data collection, and are accessible to all. The Cook Islands are collectively able to produce up to date information as needed, as evidence of their continuing dedication to national and international obligations, and in order to continue with existing, and develop new, cross-national partnerships where information sharing and support becomes the norm.

Natural environmental protections for the impacts of climate change are in place, such as an increased quantity of mature or maturing trees having been established, helping to protect coastlines, aid in water drainage, and assisting with delivering carbon neutral goals. Overhead power lines have been placed underground so that trees do not have to be cut down or back.

All infrastructure has been improved to the highest standard using the best technology and expertise available, so that prior ongoing issues are resolved or minimized as much as possible. This includes having desalination plants available on islands where drought is a risk, with buildings equipped with guttering and water tanks for water collection and retention. This in turn means that communities need to be equipped with the necessary knowledge, skills and equipment for ongoing maintenance.

Telecommunications systems would be operating to the highest capacity, be reliable, as well as physically and financially accessible to all. These systems will be significant aids in specialized and general education and information dispersion. A digital repository for up to date climate

change-related information including planning and emergency information, as well as data collected from ongoing monitoring will be in place and well publicized so that anyone that needs to access it, can.

Health services will be equipped to monitor any new emerging illness and disease, and have systems in place to swiftly acquire the best remedies and protections needed to immobilise any such outbreaks. Easily accessible, affordable and confidential mental health services will be established, so that anybody needing support can have it. In this 'ambitious' best case scenario, the possibilities of having to relocate will be minimized but will perhaps not be completely avoidable for those in vulnerable localities; as such, all necessary support plans and structures should be in place to support any such movements, including financial, physical and psychological.

New developments, particularly in more population dense areas (Rarotonga primarily) will be in place where more intensive living situations are instituted and functioning efficiently. While this will equate to a significant lifestyle change for many, the strong sense of cultural and environmental connections and understandings that have been fostered through programs utilizing local and 'outsider' expertise and knowledge, will assist in making such transitions smoother and more welcomed.

Planning for food security in relation to the varying needs of Rarotonga and the pa enua, so that the anticipated impacts of coral bleaching and ocean acidification on kai moana, along with food availability on land will not be problematic. Growing different foods, and in places where food might not have traditionally been grown (such as further inland away from rising sea levels) will have become common practice. Allowing or making land not previously used or available for agricultural production, particularly if coastal land loss or vulnerability becomes problematic, may be a part of this planning.

The Cook Islands will have implemented their plans to be reliant on renewable energy by 2025. Transportation strategies for lowering Co2 emissions across the Cook Islands and particularly Rarotonga will have been set in place, perhaps discouraging the importation and purchase of relatively high-emission vehicles, and incentivizing the use of public transport where available, and the use of non-motorised vehicles or modes of transport such as cycling and walking. Where motorized vehicles are needed, incentives and infrastructure should be in place to support e-vehicles that can be charged using solar energy or another appropriate renewable energy source. These measures will require policy changes, and a shift in mindset around transportation mode desires and practicalities.

Conclusions

As was pointed out by a contributor to the expert workshop on climate change as part of this research, it is perhaps helpful to remember that the Cook Islands are just one of many countries in the world that will be impacted by climate change. Relatively speaking, compared to what other nations may have to do or are able to do to minimise negative impacts, the Cook Islands could be seen as one of the more fortunate. While this was not said to downplay what does need to be prepared for and achieved in this nation, it is useful for keeping some perspective and remembering that we are a part of one large global community that will be going through variations of the same thing together.

Through investigating existent information about climate change relevant to the Cook Islands, and workshop focus groups with local experts in this field, a scenario sketching approach underpinned by ‘akapapa’anga and ka’a was undertaken in order to assist with planning for the probable effects of climate change with a 2050 horizon. A moderate and an ambitious approach to dealing with climate change was ultimately mapped out, with suggested strategies for each pathway provided.

Recommendations

It is recommended that the Cook Islands Government continues to act on mitigation and adaptation policies and practices that will best prepare the islands for future climate change impacts. Implementing measures that will assist with the more ‘ambitious pathway’ approach, using the most financially viable options, is recommended.

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